


A stylized graphic of a building skyline, rendered in white with black outlines, set against a green rectangular background on the left. The skyline features several rectangular buildings of varying heights.

# Erindale Campus

University of Toronto

A large, stylized diagonal graphic element consisting of three parallel lines in green, white, and black, running from the top right towards the bottom left.

Faculty of Arts  
and Science  
1971-1972

### **IMPORTANT NOTICES**

1. Students who have any problems of an academic or personal nature should consult their College Registrar.
2. The courses listed in this Calendar are those available to students of Erindale College and are subject to withdrawal or alteration without prior notice.
3. Fees, residence dues and other charges set forth in this Calendar are subject to change.



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## Important Academic Dates and Deadlines

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August 16-20	Supplemental Examinations.
September 15	Lectures and Laboratories begin.
September 17	Late registration penalty will be enforced after this date.
October 12	Erindale College Council Meeting.
October 15	Last day by which changes of course can be made.
November 15	Erindale College Council Meeting.
November 19	Last day to confirm student programmes at Registrar's Office.
November 19	Last day to withdraw from extra first term half-course without academic penalty.
December 13	Erindale College Council Meeting.
December 15	Last day of lectures – First term.
December 16-21	Examination period.
January 3	Second term begins.
January 17	Erindale College Council Meeting.
January 20	Second term fees due.
February 1	No second term course may be begun after this date.
February 14-18	Reading week.
February 14	Erindale College Council Meeting.
February 15	Last day for withdrawal without academic penalty.
March 13	Erindale College Council Meeting.
April 7	Last day of classes. Second term.
April 17	Erindale College Council Meeting.
April 17-May 5	Annual examinations.
May 15	Erindale College Council Meeting.

## Administrative Staff

### **University of Toronto**

<i>President</i>	C. T. Bissell, C.C., M.A., PH.D., D.LITT., LL.D., F.R.S.C.
<i>Vice-President and Provost</i>	J. H. Sword, M.A., LL.D.
<i>Vice-President and Registrar</i>	R. Ross, M.B.E., M.A.
<i>Principal University College</i>	A. C. H. Hallett, B.A., PH.D.
<i>Dean, Faculty of Arts &amp; Science</i>	A. D. Allen, B.SC., PH.D.
<i>Associate Dean</i>	G. A. B. Watson, M.A., S.T.D.
<i>Associate Dean</i>	W. T. Sharpe, M.A., PH.D.
<i>Assistant Dean and Secretary</i>	W. D. Foulds, B.A.

### **Erindale College**

<i>Principal</i>	J. T. Wilson, S.M., O.B.E., PH.D., SC.D., LL.D., F.R.S.C., F.R.S.
<i>Dean</i>	E. A. Robinson, PH.D., D.SC.
<i>Associate Dean</i>	W. J. Huggett, M.A., PH.D.
<i>Associate Dean</i>	I. M. Spiegel, M.A., PH.D.
<i>Associate Dean</i>	P. P. M. Meincke, B.SC., M.A., PH.D.
<i>Registrar</i>	J. J. Rae, M.A., PH.D.
<i>Assistant Registrar</i>	L. J. Elmer, B.A., S.T.D.
<i>Librarian</i>	H. L. Smith, B.A., B.L.S.
<i>Comptroller</i>	T. Peckham, B.A., M.COMM.
<i>Administrative Officer</i>	R. S. Rawlings, B.A.
<i>Superintendent—Physical Plant</i>	A. O. Miller
<i>Director of Physical Education</i>	B. W. Bartlett, B.P.H.E.
<i>Health Service</i>	R. P. Davis, M.D. G. W. Tisdall, M.D. V. Degutis, REG.N.

## Erindale College 1971-72 Faculty

<i>Anthropology</i>	Professor F. J. Melbye, B.A., M.A., PH.D. *Professor A. Mohr, A.B., PH.D. Miss L. L. Sample, A.B., PH.D. Professor B. A. Sigmon, B.A., M.S., PH.D. Mrs. R. M. Vanderburgh, B.A., M.A.
<i>Astronomy</i>	*Professor J. R. Percy, M.SC., PH.D. Professor R. Racine, M.A., PH.D.
<i>Biology</i>	
<i>Botany</i>	Professor P. W. Ball, B.SC., PH.D. *Professor P. F. Maycock, B.A., M.SC., PH.D. Professor R. Frost, B.SC., A.R.C.S. Professor P. V. Rangnekar, M.SC., PH.D. Professor G. R. Thaler, M.SC., PH.D.
<i>Microbiology</i>	*Professor A. Guha, M.SC., PH.D.
<i>Zoology</i>	Professor D. Collins, B.SC., PH.D. Professor W. T. Geiling, B.SC., M.S., PH.D. Professor D. L. Gibo, B.A., PH.D. Professor G. K. Morris, B.S.A., M.A., PH.D. *Professor P. J. Pointing, B.SC.F., PH.D. Professor Betty I. Roots, B.SC., PH.D. Professor W. G. Sprules, B.SC., M.A., PH.D. Mr. R. Stephens, B.A.
<i>Chemistry</i>	Professor D. R. Clark, B.SC., PH.D. Mrs. R. A. Jones, PH.D. Dr. R. G. Lee, B.A., PH.D. Professor G. A. Ozin, B.SC., D.PHIL. Professor A. J. Poë, PH.D., D.I.C., D.SC. Mrs. J. C. Poë, M.SC., A.R.C.S. Professor J. J. Rae, M.A., PH.D. Professor E. A. Robinson, PH.D., D.SC. *Professor I. W. J. Still, B.SC., PH.D. Professor M. A. Winnik, B.A., PH.D.
<i>Classics</i>	Professor R. L. Beck, M.A. *Professor T. G. Elliott, B.A. Professor C. I. Reid, B.A., PH.D.

## *Earth & Planetary Sciences*

*Geology* \*Professor A. E. Oldershaw, B.SC., PH.D.

*Geophysics* \*Professor H. C. Halls, B.SC., M.SC., PH.D.  
Professor J. T. Wilson, S.M., O.B.E., PH.D., SC.D., LL.D.,  
F.R.S.C., F.R.S.

*Economics* Professor H. Flakierski, M.A., PH.D.  
Professor J. E. Floyd, B.COM., M.A., PH.D.  
Professor G. B. A. France, M.A.  
\*Professor M. J. Hare, B.COM., C.A.  
Mr. F. B. Mayer, B.COM.  
Professor G. F. McGuigan, M.A., SC.SOC.D.

*English* \*Professor T. H. Adamowski, M.A., PH.D.  
Professor Brian Corman, A.B., A.M., PH.D.  
Professor V. A. De Luca, B.A., M.A., PH.D.  
Professor D. B. Hill, M.A., PH.D.  
Mr. U. Kareda, B.A., M.A.  
Professor D. I. Lancashire, M.A., PH.D.  
Mr. M. Levene, B.A., M.A.  
Professor R. Rower, M.A., PH.D.  
Professor R. W. Van Fossen, B.A., M.A., PH.D.

*French* Mrs. G. Chesneau, L.'ESL., C.A.P.E.S., D.E.S.  
Professor C. Cloutier-Wojciechowska, L.'ESL., D.E.S., D.DL'U.  
Mrs. M. Ducretet, L.PH.L., AGREG.  
Mr. P. Findlay, B.A., M.A.  
Mrs. J. Le Gall, B.A., M.A.  
Mrs. M. Raine, B.A., M.A.  
\*Professor A. L. Stein, M.A., PH.D.  
Professor D. A. Trott, B.A., M.A., PH.D.  
Professor H. H. Weinberg, M.A., PH.D.

*Geography* Professor H. Andrews, B.A., M.SC., PH.D.  
Mr. A. R. Byrne, B.A., M.A.  
Mr. T. F. McIlwraith, B.A., M.A.  
\*Professor D. F. Putnam, B.S.A., PH.D.

*German* \*Mr. W. Meyer-Erlach, B.A., M.A.  
Professor J. P. Payne, M.A.

*History*

\*Mr. M. Dafoe, B.A., M.A.  
 Miss Claire La Vigna, B.A.  
 Mr. J. H. MacLachlan, B.A.SC., ED.M.  
 Professor D. P. Morton, M.A., PH.D.  
 Professor D. L. Raby, B.A., PH.D.  
 Professor W. B. White, A.B., M.S., PH.D.

*Italian*

Miss P. Frohman, B.A., M.A., PHIL.M.  
 Mrs. A. Gris, B.A., M.A., PHIL.M.  
 \*Mr. L. McCormick, B.A., A.M.

*Mathematics*

Professor T. Bloom, B.SC., M.A., PH.D.  
 Professor C. R. Crawford, A.B., M.A., PH.D.  
 Professor P. H. H. Fantham, M.A., D.PHIL.  
 Professor W. D. Lakin, B.S., M.S., PH.D.  
 Professor J. E. LeBel, M.A., PH.D.  
 Professor J. Marsden, B.SC., PH.D.  
 Professor M. Mather, B.A., PH.D.  
 Professor I. B. MacNeill, M.A., PH.D.  
 Professor F. D. Tall, A.B., PH.D.  
 \*Professor S. M. Trott, B.SC., M.A., PH.D.

*Philosophy*

Professor J. V. Canfield, M.A., PH.D.  
 Professor C. E. Cassin, M.A., PH.D.  
 \*Professor W. J. Huggett, M.A., PH.D.  
 Professor A. Rosenthal, M.A., PH.D.  
 Professor M. Schiller, B.A., PH.D.  
 Mr. A. Urquhart, M.A.

*Physical Education*

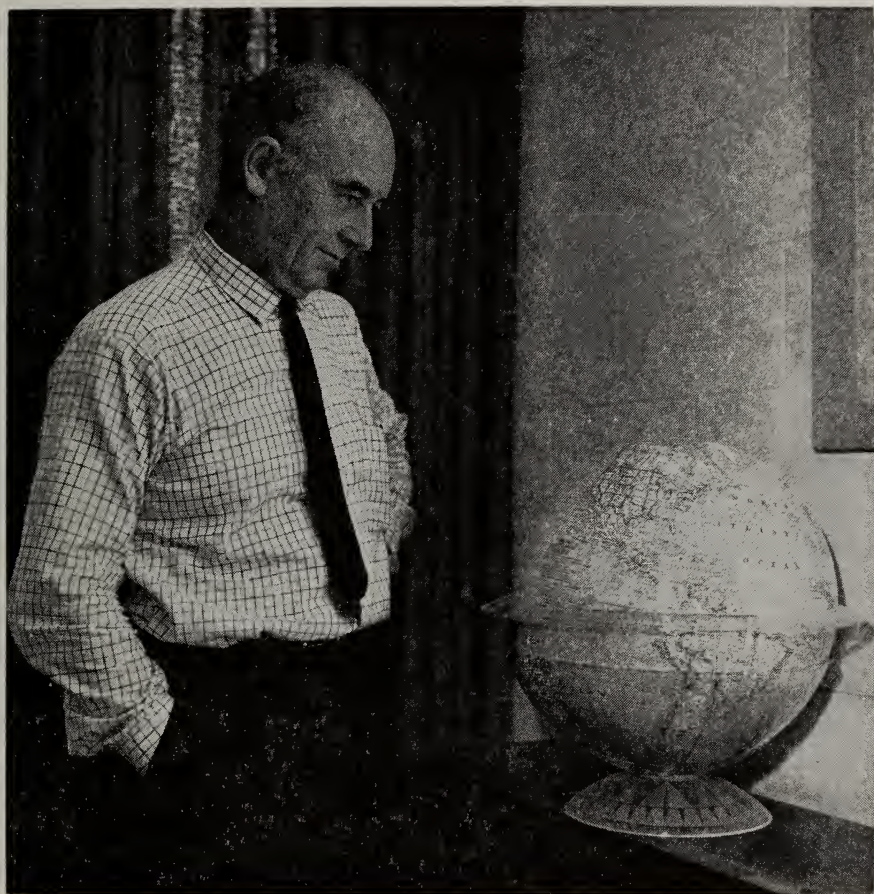
Mr. B. W. Bartlett, B.P.H.E.  
 Miss Sue Cook, B.A.

*Physics*

Professor D. Dunlop, M.A., PH.D.  
 Professor R. M. Farquhar, M.A., PH.D.  
 Dr. Henry C. Halls, B.SC., M.SC., PH.D.  
 Professor P. P. M. Meincke, B.SC., M.A., PH.D.  
 Professor G. Stegeman, B.A.SC., M.SC.  
 \*Professor H. W. Taylor, M.SC., PH.D.  
 Dr. B. J. Thomas, B.SC., PH.D.  
 Professor S. H. Vosko, B.ENG., PHYS., M.SC., PH.D.  
 Professor S. S. M. Wong, M.S., PH.D.

<i>Political Science</i>	Professor J. Barros, A.B., M.I.A., PH.D. Professor R. B. Day, B.A., M.A., PH.D. Mr. D. H. Gardner, M.A. Professor A. A. Kontos, M.A., PH.D. *Professor B. Kovrig, M.A., PH.D. Professor M. Landauer, B.A., M.A. Professor D. V. Smiley, B.ED., M.ED., M.A., PH.D.
<i>Psychology</i>	Professor T. M. Alloway, M.A., PH.D. Mr. K. Blankstein, B.A., M.A. Professor G. Craik, B.SC., PH.D. Professor L. Krames, M.A., PH.D. Professor P. L. Pliner, B.S., PH.D. *Professor I. M. Spigel, M.A., PH.D.
<i>Religious Studies</i>	*Professor L. J. Elmer, B.A., S.T.B., S.T.D. M. J. Lavelle, B.A., M.A. L. E. Schmidt, B.A., M.A.
<i>Russian</i>	Mr. K. Lantz, B.A., M.A. *Mr. N. Shneidman, M.P.H.E., M.A.
<i>Sociology</i>	Professor A. M. Bennett, M.A. Miss Helen Breslau, B.A., M.A., M.PHIL. Mrs. M. Cooper, B.A. *Professor W. E. Kalbach, M.A., PH.D. Professor Pierre Lorion, B.A., M.A. Mr. A. T. R. Powell, M.A.
<i>Spanish</i>	Professor O. Hegyi, M.A., PH.D. Professor E. G. Neglia, M.A., PH.D. *Professor M. J. Scarth, B.A., M.A. Professor J. Webster, M.A., PH.D.
<i>Artist-in-Residence</i>	Mr. David Blackwood, B.A.
<i>Drama</i>	Mr. J. Astington, B.A., M.A.
<i>Musician-in-Residence</i>	Mr. W. Buczynski, A.R.C.T., L.R.S.M.
<i>Writer-in-Residence</i>	Mr. Peter Such, B.A., M.A.

\*Faculty Adviser



J. Tuzo Wilson, *Principal*

## Principal's Message

Welcome to Erindale! You will find in the university atmosphere an opportunity to learn more and to gain insights from studying the past. You should also develop a critical analysis from the study of present day society. I hope that you will find here an opportunity to learn more about yourself and a challenge to seek solutions to the problems of the '70s; pollution, poverty, war, and prejudice. Come to Erindale and join others who have the desire for knowledge, wish to help mankind, and who are seeking a more intelligent solution of the scientific and social problems of our day.

The first class of students at Erindale College graduated in June 1970 and received Bachelor of Arts and Bachelor of Science degrees from the University of Toronto. This was possible for several significant reasons. Erindale College, although on its own campus, is a college of the University. Members of its faculty are cross-appointed to the St. George campus where many of them also teach. Its curriculum and budget are approved by the Senate and Board of Governors of the University. Students, particularly in the senior years, are allowed to take some courses on the St. George campus which are not yet given at Erindale.

While everyone at Erindale appreciates the advantages of this interchange, it has not prevented the College from experimenting. This year, the course University 100 was introduced to give some of the freshmen in the humanities and social sciences a chance under supervision to plan and organize a large part of their own work. This has given those who were uncertain about their future an opportunity to decide what courses to take in later years. The calendar shows many other new courses, a number of which are interdisciplinary. All students in the Faculty of Arts and Science at the University of Toronto now have great freedom in choice of courses.

Besides formal instruction the College is fortunate in having an Artist-in-Residence, a Musician-in-Residence, a Writer-in-Residence and a Dramatist who work informally with students and who encourage them in their endeavours. The students have produced several plays and an excellent exhibition of their own work.

In 1971 Erindale will again be offering in addition to courses to full-time students at the conventional times a variety of courses to part-time students. To meet their convenience these will be given at three different times; in the evening during the winter and during the summer both day and evening.

## Admission Requirements

Admission requirements for all three campuses of the University of Toronto are the same.

### **New Developments**

The University of Toronto's entrance requirements, effective in 1971, are outlined on the pages following. Recently there have been significant curriculum developments in some secondary schools (individual timetabling, the credit system, etc.) and in consequence the University of Toronto has arranged for more flexible subject requirements. It should be emphasized, however, that students in schools which are organized on the more structured, traditional pattern may, if they wish, continue to plan their Grade 13 programmes as at present. In either case it is left to the school to determine what constitutes an appropriate Grade 13 programme.

For 1971 the University of Toronto is not publishing a list of acceptable subjects, but does give advice about subjects considered of major importance.

The new provisions make no reference to credits. Many schools are planning to operate in future on the subject basis only and in these schools five subjects will normally make up a full Grade 13 programme. The new requirements take account of this, but in the case of schools remaining on the old system of single and double credits, the University of Toronto will give double credits for subjects assigned double credit by the school, and four subjects will be perfectly acceptable.

### **Basis of Admission**

Entrance to the First Year of the undergraduate courses is offered, depending upon the number of places available, to candidates from Ontario secondary schools who demonstrate good standing, based upon the following evidence:

1. Completion of secondary school studies, including a *full year of academic work at the Grade 13 level*.
2. A recommendation by the secondary school last attended regarding fitness for University studies.
3. A complete academic report for the three final years of secondary school.
4. Results of standardized tests offered by the Service for Admission to College and University.

### **Recommended Principles of Subject Selection**

1. Throughout the secondary school years students should study in as many of the following areas as possible: English, French and other languages, mathematics, sciences, social studies. Students should also consider carefully what aspects of their projected university work will entail prerequisite studies.
2. A full grade 13 programme should normally include work in at least *five* different subjects. If a school considers a subject to have relatively greater or less weight than the other subjects in the school's programme, then the total number of subjects may be somewhat adjusted.

3. Subjects newly introduced into the grade 13 curriculum will be recognized by the University, which continues, however, to place a high value on previously recognized subjects involving study over a period of years and such subjects should normally constitute the major part of a grade 13 programme presented for admission.
4. Candidates are advised to include in their grade 13 programme at least two of: English, French or another language, mathematics, science.
5. Each faculty regards certain grade 13 subjects as necessary preparation and these are listed in Sections 4 and 5 of the Undergraduate Admissions Handbook 1971-2.

### Notes for Students

1. No minimum mark or percentage is prescribed for admission to the University, but because of the pressure of applications and the nature of the University courses it is likely that a student will require a school average above 60% in order to be considered for selection.
2. The University is no longer making a distinction between one-credit and two-credit subjects, but would expect when a student has studied approximately twice as much material in some subjects as in other subjects two marks would be given for these subjects. These marks could be identical or different according to school practice. It is assumed that all results reported for English and language subjects will include literature as well as composition.
3. The University of Toronto does not specify the minimum number of years to be spent in secondary school. If a school's organization permits certain students to complete their studies to the end of grade 13 in fewer than five years, applications will be welcomed from those students. The University does not accept applications from students at the end of their grade 12 work.
4. If a student takes more than five years to complete his studies to the end of grade 13, the University expects correspondingly higher standing: extenuating circumstances are considered if reported by the school.
5. Applications are considered from students whose credentials do not comply with the entrance requirements of the University, but, as fully qualified applicants outnumber the entrance places annually available, such students are expected to offer evidence of exceptional attainments to compensate for entrance deficiencies.
6. Candidates from educational jurisdictions outside Ontario should present a subject pattern which generally conforms with this announcement and in addition specifically prepares them for their own universities. They may improve their competitive position by taking the aptitude and applicable achievement tests offered by the Service for Admission to College and University

or the aptitude test offered by the College Entrance Examination Board. For information they should write to the Service for Admission to College and University, 151 Slater St., Ottawa, Canada, or to the College Entrance Examination Board, Box 592, Princeton, New Jersey, 08540, U.S.A.

### **Application Procedures**

Candidates currently in Ontario Grade 13 should apply through their high school using the General Application Form. Applications received from such candidates by April 1st will be given early consideration.

Candidates from other provinces should write to the Office of Admissions for a questionnaire which they will be invited to fill out for preliminary consideration.

### **Summary of Terminal Dates**

Applications for admission to undergraduate degree and diploma courses should be submitted as early as possible in the year for which the applicant seeks admission, and not later than the dates below.

1 April 1971 Applications to be considered for Early Admission.

1 June 1971 Applications for regular full-time courses.

### **Mature Students**

Students twenty-four years of age or over, residents of Ontario for at least one year, who have a sound academic record, will be considered for admission to the Faculty of Arts and Science as mature students upon completion with high standing of one of the Pre-University Courses offered by the Division of University Extension (or an equivalent course). Persons wishing to apply as mature candidates should consult the Office of Admissions about their eligibility before undertaking one of the Pre-University Courses described since successful completion of a Pre-University Course does not in itself ensure selection.

Courses with scientific content such as those offered by Professional Faculties often have additional requirements. This information may also be obtained from the Office of Admissions.

### **Admission to Advanced Standing**

An undergraduate of another university or of another faculty in this University may be admitted to advanced standing on such conditions as may be prescribed and must apply to the Office of Admissions before June 1. Advanced standing credit is awarded to students who at another university or faculty have taken work which is equivalent in content to work which would have been taken had they been enrolled in this Faculty. Each application is considered individually in terms of the student's previous record and the courses offered in the Faculty.

No applicant will be eligible for advanced standing from another university unless he has obtained exceptionally high standing in his academic programme at the other

institution. High standing will also be an important factor in considering applicants for admission to advanced standing from other divisions of this university.

An applicant for admission to advanced standing must submit, with his application for admission, the Ontario Grade 13 certificate or equivalent; and an official transcript of his record in the university or faculty from which he wishes to transfer, showing the specific courses which he has completed with his standing in each.

### **Application for Admission and Registration**

Students currently in Grade XIII apply for admission to the University of Toronto on *Application Forms* provided by the Secondary Schools (High Schools). A *Supplementary Application Form* is then sent on which the student indicates his choice of college. If the application is accepted a *Letter of Admission* is sent to the student. When this is received the student should bring it as soon as convenient to the Registrar's Office at the college indicated on his letter of admission, at which time a *Choice of Courses Form* is filled out. The final step in Registration is payment of fees (see Fees). On presenting the *Fees Receipt* at the Registrar's Office a *Student Identification Card* will be issued. This completes registration and may be done anytime up to September 17th. To avoid line-ups and long delays the student is urged to complete all aspects of registration considerably before this date.

Students not currently in Grade XIII fill out application forms provided by the *Office of Admissions*. These must be returned to the Office of Admissions before April 1st. The subsequent procedures are the same as those described above.

Students who wish to be granted credit for courses taken at other Universities (Advanced Standing) should indicate this clearly on their application forms.

## Schedule of Fees

This is a condensation of the section on Fees from the Arts and Science Calendar which sets out a complete fees schedule. Fees are subject to change by the Board of Governors.

### **Bachelor of Arts and Bachelor of Science**

The academic fee includes the following fees: tuition, library and laboratory, examination, degree, physical education. Incidental fees include such things as Hart House (men), students' societies, athletics, health services, etc.

FEES			INSTALMENTS	
<i>Academic</i>	<i>Incidental</i>	<i>Total</i>	<i>First Term</i>	<i>Second Term</i>
Men \$470	\$52	\$522	\$287	\$238
Women \$470	\$46	\$516	\$281	\$238

Each student enrolled in the Faculty of Arts and Science (Erindale College) must pay annual fees to the Office of the Comptroller, Fees Department, according to the above schedule. (Please indicate College and student number on the back of the cheque.)

Either full fees or the first instalment of fees must be paid before a student is permitted to attend classes. The second instalment must be paid by January 20 of each year.

All University fees must be paid in full before a student may receive his examination results or be credited with standing in his year.

### **Payment of Fees**

Students should follow the instructions in the booklet "Registration and General Information" which is mailed to all students in early summer.

If the student is unable to mail his fees to the Fees Department during the month of August he should take his fees in person to the Fees Department or to the Accounting Section at Erindale College. Fees will be accepted at the College only during the month of September.

### **Deductions from Fees**

- 1) *Scholarships*: A student may apply to his fees any scholarship awarded by the University of Toronto or by Erindale College.
- 2) *Ontario Student Awards (OSAP)*: A student may use the loan portion of his OSAP award to pay his first term fees. To do this he must produce his Student Award Statement and enclose it with his fees form. Students who have not made early application for OSAP and have not received the result of their application will be required to pay cash.

*Payment of the Second Instalment of Fees by OSAP Grant Cheque:* Students will not be fined for late payment of fees if the delay in payment is due to the late arrival of the Grant cheque. However, if the Grant is *less* than the \$238 for the second term fees, then the student must pay the difference before January 20.

### **Penalty Fees**

- 1) *Late Registration:* A student who registers after the final day of the registration period is subject to a fine of ten dollars plus one dollar for each day of delay, to a maximum of twenty dollars.
- 2) *Late Confirmation of Programme:* Each student is required to confirm the College's record of his programme and to apply for final examinations in his courses by November 20 of each year. A student who completes these procedures late is subject to a fine of one dollar per day, to a maximum of twenty dollars.
- 3) *Late Payment of the Second Instalment of Fees:* The second term instalment is due on or before January 20 of each year. A student who is late with his second instalment is subject to a fine of three dollars per month, to a maximum of ten dollars.

## **Scholarships and Financial Assistance**

Various types of financial aid offered to full time students:

*Scholarships or Prizes:* Awarded for academic excellence without reference to financial need.

*Bursaries:* Awarded to students who demonstrate both good academic standing and financial need.

*Interest-free Loans:* Provided to students who have financial need. Loans are repayable according to definite loan agreements.

Erindale College students, as members of the University of Toronto, are eligible for awards offered by the Province of Ontario, the University of Toronto, and Erindale College.

### **Costs of University Education**

In the year 1970-71, total cost to first year students (for the 8-month academic session only) varied from \$2,000 to \$2,500 for students living in a university residence or away from home, and from \$1,300 to \$1,500 for students living at home in the Toronto area. The total amount includes fees and an allowance of approximately \$500 for miscellaneous expenses such as books, supplies, laundry, cleaning, clothing and transportation.

### **Ontario Student Awards Programme**

The Ontario Student Awards Programme (OSAP) should be regarded as the primary source of financial assistance for needy Ontario students. Other assistance such as bursary assistance is available only in small amounts to students who do not qualify for Ontario Student Awards or who have received OSAP assistance which is insufficient to meet their needs.

OSAP is intended to supplement rather than replace private resources. In order to determine the additional funds required, the Province assesses the resources of the family and/or the student. In 1968-69 58% of dependent students qualifying for awards came from families with gross income of \$7,000 or less; 22% came from families with income between \$7,000 and \$9,000; and 13% from families with gross income between \$9,000 and \$11,000. An Ontario Student Award is part loan (interest-free until six months after leaving the university) and part non-repayable grant. In 1970-71, awards have ranged from as little as \$50 to as much as \$2,000 depending upon assessed need. A description of the regulations is contained in a brochure available from the Registrar's Office or the Student Aid Office, Erindale College.

Application forms may be obtained from the Office of Student Awards, Simcoe Hall, University of Toronto or the Registrar's Office, Erindale College. They must be returned to the Office of Student Awards, Simcoe Hall, University of Toronto, *preferably in person. Students are urged to apply early in the summer.* Late applicants may have to wait more than two months for assessment of their applications and receipt of their awards. OSAP applications must be submitted by

October 31, 1971. Applications submitted after this date but before January 31, 1972 will be considered for one-half of the normal assistance. Only in cases where a sudden change in circumstances creates grave need will applications be accepted after January 31, 1972.

### **ADMISSION SCHOLARSHIPS**

#### **1) University of Toronto Admission Scholarships**

Students entering the first year at Erindale College who have achieved high academic standing at their high schools are eligible for a large number of scholarships awarded by the Senate of the University of Toronto. The scholarships are listed in the booklet, *University of Toronto Admission Awards, 1971-72*, available at any Ontario high school.

Application forms available: High School Principal or Guidance Officer; deadline April 19, 1971.

#### **2) Erindale College Admission Scholarships**

Students entering the first year at Erindale College who have achieved high academic standing at their high schools are eligible for the following scholarships awarded by the Council of Erindale College.

##### **Erindale College Special Admission Scholarships**

Awarded from funds allocated by the Senate of the University of Toronto. The value and terms of award for these scholarships will be determined by the Erindale College Council.

Application forms available: High School Principal or Guidance Officer; deadline April 19, 1971.

##### **Erindale College Varsity Fund Continuing Scholarships**

Three admission scholarships awarded annually and renewable if first class standing is maintained. Value: \$350 for the first year and \$500 for each of the three subsequent years.

Application forms available: High School Principal or Guidance Officer; deadline April 19, 1971.

##### **Erindale-Cooksville Lions' Centennial Awards**

Awarded annually to students entering first year from the geographical area served by the Club. Two awards—Value: \$150 each.

Application forms available: High School Principal or Guidance Officer; deadline April 19, 1971.

##### **Oakville University Women's Club Award**

Awarded annually to a female graduate of an Oakville Secondary School. Value: \$200 (may be subdivided).

Application forms available: High School Principal or Guidance Officer; deadline April 19, 1971.

## **IN-COURSE SCHOLARSHIPS AND AWARDS**

### **1) University of Toronto Scholarships**

Students in second, third or fourth year who achieved high academic standing (Grade A) in the preceding year are eligible to apply.

Application forms available: Erindale College Student Aid Office; deadline October 15, 1971.

### **2) Erindale College Scholarships**

Students who achieve high academic standing in either first, second or third year and who will be enrolling in the next year at Erindale College are eligible. All students who achieve high standing will be considered automatically. Application not required.

#### **Mississauga University Women's Club Book Prize**

Awarded to the woman student enrolled in the first year who obtains the highest standing in the final examinations of that year.

Value: \$50. Application not required.

#### **Progressive Conservative Women's Association (Peel South) Award**

Awarded to a student entering third year who is specializing in Political Science.

Value \$200. Application not required.

#### **The Mrs. Lois Spigel Book Prize**

Gift of Dean I. M. Spigel, in memory of Mrs. Lois Spigel, awarded to a student in second, third or fourth year who is specializing in Social Sciences.

Value \$50. Application not required.

#### **Prize in Hellenistic History**

Gift of the Chreston-Macedonian Foundation, awarded to the student with highest standing in a second year Greek and Roman History course.

Value: \$150. Application not required.

#### **Prize in Slavic Literature**

Gift of the Chreston-Macedonian Foundation, awarded to the student having the highest standing in a course or courses in Slavic literature.

Value: \$150. Application not required.

#### **I.O.D.E. Patricia Nodwell Award, Windsor Rose Chapter**

In memory of Mrs. Patricia Nodwell, awarded to a student in second, third or fourth year who has taken in the preceding year and is taking in the current year, courses in any two of the following subjects: English, History, Philosophy, or Psychology. The candidate must have obtained at least a Grade B standing in the previous year's work.

Value \$150.

Application forms available: Erindale College Student Aid Office; deadline October 15, 1971.

### **Erindale College Special Scholarships**

Awarded to students in second, third or fourth year who achieved high academic standing in the preceding year at Erindale College. The number and value of the scholarships will be determined by the Erindale College Council.

Application not required.

### **3) Other Scholarships and Prizes**

Many other scholarships and prizes from a variety of sources are available to Erindale College students. Details of these are displayed on the Notice Board outside the Student Aid Office.

## **BURSARIES**

### **1) University of Toronto In-Course Bursaries**

Students in second, third or fourth year who are in financial need and who have achieved a good academic record (at least B) in the preceding year are eligible to apply.

Application forms available: Erindale College Student Aid Office; deadline October 15, 1971.

### **2) Erindale College Bursaries**

#### **Mississauga University Women's Club Award**

Awarded to a mature student (preferably female) enrolled in any year, whose studies have been interrupted and who has financial need.

Value \$300 (May be sub-divided)

Application forms available: Erindale College Student Aid Office; deadline October 15, 1971.

#### **Chreston-Macedonian Bursaries**

Gifts of Mr. C.S. Chreston, awarded to students in real financial need who are making satisfactory academic progress.

Value \$150

Application forms available: Erindale College Student Aid Office; deadline January 15, 1972.

## **EMERGENCY LOANS**

**1)** The Students' Administrative Government of Erindale (SAGE) administers an Emergency Loan Fund. Loans are for students who are unable to receive assistance from any other source and who need funds in order to continue their studies. The loans are short-term and repayable according to a definite loan contract.

Application forms available: Office of the President of SAGE.

**2)** To assist students requiring small short-term loans, arrangements can be made in the Office of the Administrative Officer. Repayment is normally required within one month.

## **General Information**

Erindale College, one of the eight Colleges that make up the Faculty of Arts & Science in the University of Toronto, opened in September 1967, as the western campus of the University of Toronto. The College offers the New Programme of the University of Toronto and students may qualify for the B.A. or the B.Sc. in either a three or a four year programme. The admission regulations for all three campuses of the University of Toronto are the same.

Erindale College is located twenty miles west of the Toronto City Hall in the town of Mississauga. It may be reached by taking the Queen Elizabeth Highway, or Highway 5, or the MacDonald Cartier Freeway (401) to Mississauga Road. (See the map on back cover.)

A bus service is provided for staff and students between the College and the Islington-Bloor Subway Station, the Clarkson GO Station and the St. George campus (Convocation Hall).

Full-time day students wishing information about the College should address: The Registrar, Erindale College, Mississauga Road, Mississauga, Ontario; Tel. 828-5231 or 828-5331.

Part-time students wishing general information about courses being given at the College should address: Division of University Extension, 84 Queen's Park, Toronto 5, Ontario; Tel. 928-2392.

### **Counselling**

Every effort is made to provide students with both general and specialized counselling in all areas of personal concern, e.g. academic, medical, psychiatric, financial, placement and vocational.

The Office of the Registrar is the place for general counselling and advice on day to day queries or problems.

In areas where specialized assistance is needed this Office will refer the student to the appropriate service. Prospective students are urged to obtain academic counselling, course selection assistance, etc. from the Registrar's Office during the summer months.

### **Library and Study Areas**

The Erindale College Library has an excellent and ever growing collection of books, periodicals, film strips, cassettes, clippings and other materials for student and staff use. In addition to this collection of some 95,000 volumes students and faculty have access to the more than two million volumes of the University of Toronto Library on the St. George campus. There is a regular book delivery service from the University of Toronto Library to the Erindale campus.

In addition the College Library has reading rooms and a number of study carrells supplied with audio-tape equipment. Numerous other study areas are located throughout the College buildings.

For the use of students in language courses there is a newly equipped language laboratory with some forty listening and recording booths.

### **Health Service**

In addition to a Registered Nurse in full-time attendance Doctors are on-campus for extended periods of time several days a week providing medical and psychiatric assistance. These services are completely confidential and free of charge.

Students are not required to have a medical examination unless they are taking part in organized team sports. Chest X-rays and vaccinations are required for all new students. These services are provided by the Health Service at the beginning of term.

### **Government**

The principal governing body of the College is the Erindale College Council (E.C.C.) which consists of Faculty, Students and Administrative Personnel. The Students Administrative Government of Erindale (S.A.G.E.) organizes and administers college functions and social activities and exercises considerable influence in the policy and planning of the College.

### **Athletics and Recreation**

The Erindale College Athletic and Recreational Association (E.C.A.R.A.) offers a great variety of athletic and recreational activities according to student interest. In addition to facilities, clubs, etc. on the College campus all full-time students have access to the use of St. George campus facilities and its athletic and recreational programmes. At present Erindale College has teams competing in the University of Toronto inter-faculty league and against other universities in various sports: basketball, ice hockey, lacrosse, soccer, volleyball, curling, field hockey, golf, judo, fencing, karate, tennis and sailing.

E.C.A.R.A. likewise organizes an extensive intramural programme of men's and women's sports and offers instruction in various recreational skills.

### **Student Housing**

a) *On-Campus*—Limited housing on the Erindale College campus is provided by the Erindale College Housing Association. While large scale student residences are planned for the near future (1972?) at present the Association provides five on-campus houses with accommodation for approximately 40 students. The houses are equipped with the basic furnishings, including cooking facilities. For those who prefer, meals are available in the College Cafeteria. The projected cost, not including meals or laundry, will be \$412.50 for the academic year 1971-72. For further information write or phone: Erindale College Housing Association, Mississauga Road, Mississauga, Ontario; Tel.: 828-5331 or 828-5344.

b) *Housing in the Mississauga Area*—A listing of accommodations with families in the Mississauga area, i.e. within a relatively short distance from Erindale College is available at the Office of the Registrar, Room 213, Erindale College.

The Erindale College bus routes cover part of the area. The cost of such housing varies depending upon facilities offered; room only, approximately \$15.00 per week; room and board, approximately \$20.00 per week.

**Foreign Students**

The University of Toronto, International Student Centre (I.S.C.) is anxious to be of service to overseas students. Pre-departure advice, information on arrival, accommodation, cost of living, financial aid, employment, food, health requirements, insurance, etc. is readily available. Overseas students are encouraged to write: International Student Centre, 33 St. George Street, Toronto 5, Ontario, Canada.

## Courses, Subjects and Academic Programmes

The word *subject* refers to a particular discipline such as *English*, *Chemistry*, *Philosophy* or *Psychology*. The word *course* refers to a unit in the academic programme such as *Chemistry 120E* (CHM 120E), *History 100* (HIS 100) or *Sociology 100* (SOC 100). The word programme refers *either* to the collection of courses taken by the individual student *or* to a particular group of courses that constitute a *Specialist Programme*.

The University of Toronto, Faculty of Arts and Science, St. George Campus Calendar should be referred to for details of the Rules and Regulations of the Faculty. Questions concerning the content and scope of particular courses or subjects, and the requirements for *Specialization* should be made to the relevant *Faculty Advisers* (Pages 5-8) or to the College Registrar.

No attempt is made in the Arts and Science Faculty to distinguish between Honour and General Courses or Programmes. Since 1969 these terms are no longer used in the University of Toronto but have been replaced by the more exact terms *Generalist* and *Specialist*.

A student entering the Faculty of Arts and Science has a free choice from among all of the courses offered to first year students. Thus he does not need to make an irreversible decision to be in *Arts* or *Science* or to follow a three or a four year programme of study. These difficult decisions can now be made at various points of a student's progress through the University in terms of new and developing interests and levels of achievement.

A three-year (15 course) programme, or a four year (20 course) programme designated as a *Generalist Programme* can be made up of courses selected in terms of a wide breadth of interest or relatively narrow interest according to the student's choice. Particular combinations of courses are designated as *Specialist Programmes*. Required courses for a particular specialization are laid down by specific disciplines whose faculty advisers should be consulted for further information. . . . A student is allowed to fulfill the requirements for specialization in *one* or *more* subjects.

It should be noted that the flexibility of choice now available to students does not prevent a student with definite aims and developed interests from following them from the start. It is hoped that even students with determined ideas will take the opportunity offered by the New Programme to explore unfamiliar areas of knowledge.

All new students are urged to seek advice from the Registrar or a Faculty Adviser before final selection of a programme of studies.

### **Availability of Courses to Other Years**

"100 series" courses are available to students in all years. No more than a total of seven can be taken in a 3-Year programme.

Certain "200 series" and "300 series" courses are available to first year students. Such courses are designated by the Roman numeral I, which appears below the course number. It is inadvisable for a student in first year to take more than *one* such course.

If a student anticipates the possibility of *Specialization* in a particular area in his higher years he should select at least one course in this subject in his first year.

In years other than the first students may wish to choose programmes which will allow them to specialize in a particular discipline; they may combine two areas (e.g. Sociology and Psychology) or they may select a set of courses that will allow them to be generalists in a particular field, e.g. science, humanities or social sciences. Students are urged to consult Faculty Advisers who can advise them concerning courses that would best fit their aims and which related courses they should take.

### Interdisciplinary Courses

At Erindale College there is a growing interest in courses that overlap the traditional interest of two or more disciplines. In some cases such courses are sponsored by two disciplines and appear under the course descriptions of each of the participating subjects, such as:

CHM 270EF, BIO 270EF	Biological Chemistry I
CHM 271ES, BIO 271ES	Biological Chemistry II
ENG 376E, GLL 376E	English Literature and the Classical Tradition
MAT 209ES, PHL 353S	Set Theory
MAT 204EF, PHL 250F	Modern Symbolic Logic
SPA 393, HIS 393	Twentieth Century Spanish History
SPA 394, HIS 294	Survey of Spanish History

Others appear as *joint* courses with no particular subject designation; for example:

CMM 220ES	Communications I
CMM 320E	Communications II
DRA 200E	Drama through Acting
JSP 200E	Simulated Society
UNI 100	Myths and Models (see below)

Through its Interdisciplinary Studies Committee Erindale College is investigating the possibility of extending such offerings in the future. In 1972-73 it is hoped to be able to offer courses in general humanities involving cinema, music and the history of art.

### University 100

University 100 is a special experimental programme for first year students that will be offered for the second time in 1971-72. It is equivalent to three course credits (three-fifths of a first year programme) and designed to give freshmen the maximum opportunity to develop their interests and talents through the study of a particular theme within a structure which allows the maximum of individual freedom and discussion. Students enrolled in University 100 take in addition two courses freely selected from those offered to first year students. Interested students should consult Professor G. F. McGuigan, the Course Adviser, telephone number 828-5286.

## PROFESSIONAL FACULTIES AND COLLEGE OF EDUCATION

Students enrolled at Erindale College may satisfy the entrance requirements to the College of Education and other Professional Faculties of the University.

### College of Education

Qualifications for a teacher's Type A Certificate requires *in general* a four-year degree with the equivalent of eight courses in the major teaching subject. Competition for entry is intense in some subjects and it is desirable that students get specific information from the Registrar of the College of Education.

### Teacher's Colleges

For admission to Teacher's College a full first year (five credits) in an academic course is required.

### Medicine

Students at Erindale College may qualify for entry to the Faculty of Medicine (and other Medical Schools). For the University of Toronto Faculty of Medicine entry is possible after two years in the New Programme, or after completion of a three or four year degree. The minimum requirements are given below and students are warned that competition for places is acute and therefore they should select a programme of studies in first and second year that leads to as many future opportunities as possible.

Two years in New Programme with high standing required for selection. Courses should include: CHM 120E, PHY 110, BIO 100, MAT 135 or MAT 110EF/S and MAT 120ES/F, and in Second Year, STA 232, CHM 235EF and CHM 236ES. (CHM 270EF and CHM 271ES are also recommended for those with interest in Biology and Chemistry).

### Dentistry

For entry to the Faculty of Dentistry completion of one year in the New Programme is required. High standing is important for selection. Courses taken should include: CHM 120E, PHY 110 and BIO 100E

### Pharmacy

For entry to the Faculty of Pharmacy completion of one year of the New Programme is required with high standing needed for selection. Courses taken should include: CHM 120E, PHY 110, BIO 100E, MAT 110EF/S and MAT 120ES/F

Students normally enter Second Year Pharmacy with advanced standing but may be required to accept as a condition a first year Pharmacy course.

### **Law**

A minimum of two years in the New Programme with high standing is required for selection. No courses are prescribed but emphasis should be placed on subjects such as Economics, Political Science, History, Philosophy and Psychology.

### **Commerce and Finance**

The Commerce and Finance programme at Erindale College consists at present of just two courses, COM and COM 221F/222s. Students with high standing in first year may be accepted for advanced standing into the second year of the course on the St. George campus. Courses should include COM 100, Mathematics, Economics and Computer Science. Interested students should consult Professor M. J. Hare, Tel.: 828-5273.

### **Plagiarism — Advice for Essay Writers**

Plagiarism is the act of presenting the ideas or words of another as your own. While it may be argued that few ideas are original, instructors expect students to acknowledge the sources of ideas and expressions that they use in essays. To represent them as self-created is dishonest and academically worthless.

You may quote or paraphrase another writer if he has stated an idea strikingly, as evidence to support your arguments or conclusions, or as a point against which to argue, but such borrowing should be used sparingly and always indicated in a footnote. The aim of scholarship is to develop your own ideas and research and only by trying to develop your own thoughts and arguments will you mature academically.

To provide adequate documentation is not only an indication of academic honesty but also a courtesy enabling the teacher to consult your sources with ease. Failure to do so constitutes plagiarism which is subject to serious academic penalty.

### **Time-Tables**

Time tables will be ready well in advance of Registration and will be mailed to all students who have accepted offers of admission or registered by mail.

*The courses listed in this calendar are subject to revision or withdrawal if necessary.*

### **Courses on the St. George Campus**

Students in first, second and third years may take a maximum of *two* courses in any given year on the St. George campus, provided the following conditions are met:

- 1) The courses chosen or their equivalents are *not* offered at Erindale College.
- 2) Satisfactory time-table arrangements can be made.
- 3) The department on the St. George campus has indicated its willingness to accept the student.

Students in fourth year may take as many courses on the St. George Campus as they choose. A student in a four-year programme who wishes to study elsewhere in his third year should consult with the professor in his field of specialization. This applies particularly to Modern Languages.

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## Groups of Related Courses

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In addition to specializing in the traditional academic disciplines, students may be interested in concentrating on a range of courses which cross the boundaries of specific disciplines. Some such groupings of courses are presented below. Some courses listed may not be offered in 1971-72. Further combinations to meet particular purposes and interests are of course possible, and students are invited to consult with members of the staff regarding their interests.

*Note:* \*not offered in English.

### Drama

DRA	200E	Drama through Acting
ENG	112	Major British Writers
ENG	212	Shakespeare
ENG	230	Varieties of Drama
ENG	306	English Poetry, Prose, and Drama, 1660-1800
ENG	332	English Drama to 1642
ENG	334EF	Restoration and 18th Century Drama
ENG	338	Modern Drama
*FRE	352	Drama from 1600 to 1800
*FRE	354	Drama from 1800 to 1950
*FRE	428	Contemporary French Literature
*GER	421	Modern Drama
GLL	200	Greek Drama in Translation
GLL	376	English Literature and the Classical Tradition
*ITA	202E	Italian Short Stories and Plays
*ITA	302s	The Italian Theatre from the Futurists to the 1960's
*ITA	399ES	Pirandello: Life vs Form
*ITA	421F	Italian Theatre up to the Novecento
PHL	291s	Film and its Aesthetics
*SPA	246F	Introduction to Modern Spanish Drama
*SPA	346Y	Modern Spanish Drama
*SPA	376F	Modern Spanish American Drama
*SPA	443Y	Golden Age Drama

### Renaissance, Reformation, and Enlightenment

ENG	112	Major British Writers
ENG	165	English Literature—Forms and Approaches
ENG	212	Shakespeare
ENG	302	English Poetry and Prose, 1500-1600
ENG	304	English Poetry and Prose, 1600-1660
ENG	306	English Poetry, Prose and Drama, 1660-1800
ENG	322	Fiction before 1832
*FRE	320	The Literature of Classicism

*FRE	322	Literature of the Enlightenment
*FRE	340	French Poetry
*FRE	352	Drama from 1600 to 1800
*GER	220	Enlightenment and "Storm and Stress"
*ITA	202E	Italian Short Stories and Plays
*ITA	300E	Italian Literature
*ITA	310E	The Divina Commedia of Dante
*ITA	311EY	The Decameron of Boccaccio
*ITA	313E	Petrarca e petrarchismo
*ITA	321E	The Italian Epic in the Sixteenth Century
*ITA	470E	What is Romanticism in Italy?
PHL	204S	Literature and Philosophy
PHL	243F	The Age of Reason: Seventeenth Century Thought
PHL	244S	The Age of Enlightenment, Eighteenth Century Thought
*SPA	333Y	Golden Age Poetry
*SPA	443Y	Golden Age Drama
*SPA	453Y	Golden Age Prose

### **Prose and Poetry in The Last Two Centuries**

ENG	108	Forms of 20th Century Literature
ENG	112	Major British Writers
ENG	152	Canadian Literature in English
ENG	165	English Literature: Forms and Approaches
ENG	218	Major American Authors
ENG	220	Varieties of Prose Fiction
ENG	240	English Poetry
ENG	308	Romantic Poetry and Prose
ENG	324	Fiction, 1832-1900
ENG	328	Modern Novel
ENG	348	Modern Poetry
ENG	350	American Literature, 1607-1865
ENG	356	Canadian Fiction
ENG	372	Literature and Social Criticism: The Problem of Individualism
ENG	417	Four Major 19th Century Authors
*FRE	140	Studies in Modern French Literature
*FRE	142	Man and Society in French Fiction
*FRE	330	The Literature of French Canada
*FRE	340	French Poetry
*FRE	364	Prose Fiction from 1800 to 1950
*FRE	428	Contemporary French Literature
*GER	120	Modern Literature
*GER	321	Nineteenth Century Prose and Poetry

*GER	420	Prose and Poetry, 1895-1945
*GER	422	Contemporary Literature
*ITA	202	Italian Short Stories and Plays
*ITA	301EY	The Modern Italian Novel
*ITA	303EY	Italian Poetry in the 20th Century
*ITA	390ES	Verga e la Tristezza Faticosa del Vivere
PHL	204S	Literature and Philosophy
*SPA	257S	Readings from Modern Spanish Prose
*SPA	258	Panorama of Spanish Literature
*SPA	356Y	Modern Spanish Novel
*SPA	366S	Spanish-American Poetry
*SPA	382S	Spanish-American Novel
*SPA	385F	Spanish-American Story and Essay
*SPA	436Y	Modern Spanish Poetry
SLA	210	Nineteenth Century Russian Literature
SLA	310	Twentieth Century Russian Literature
SLA	312	Tolstoy and Dostoevsky

### British Studies

Most courses in ENG, plus

GLL	376	English Literature and the Classical Tradition
HIS	306E	Nineteenth Century Britain
PHL	232S	The Philosophy of Bertrand Russell
PHL	244S	The Age of Enlightenment: 18th Century Thought
POL	202	Political Economy and Public Policy
POL	205F	British Government and Politics

### Romance Studies

All courses in FRE, ITA, SPA, plus

HIS	204E	Italy-Survey
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### Eastern European Studies

All courses in SLA, plus

ECO	101E	Modern European Economic History
ECO	347E	Economic Growth and Planning in a Socialist Economy
HIS	206E	Russia — Survey
HIS	310E	Eastern Europe — Special topic
POL	204	Russian Government and Politics
POL	329S	Marxism & Leninism
POL	414S	Politics and Government of Communist East Europe

**Canadian Studies**

ANT	241E	Indians of North America
ANT	304E	Status and Role in Canadian Indian Societies
ECO	100	Introduction to Economics
ECO	221	North American Economic History
ECO	228E	Contemporary Economic Problems and Policy
ECO	328	International Economics and Policy
ECO	336	Public Finance
ENG	152	Canadian Literature in English
ENG	356	Canadian Fiction
*FRE	142	Man and Society in French Fiction
*FRE	330	The Literature of French Canada
GGR	315E	Resource Development
GGR	351E	Historical Geography of Northeastern North America
GGR	361E	Canada: Contemporary Regional Study
HIS	205E	Canada, 1663-1967
HIS	301E	Canadian Parties and Politics
HIS	307E	Canadian History from Contemporary Issues
HIS	308E	Canadian History — Special Topic
PHL	205F	Contemporary Social Issues
PHL	213s	The University and Canadian Society
PHL	283s	The Analysis of Propaganda
POL	100	Introduction to Canadian Politics
POL	202	Political Economy and Public Policy
POL	323	Topics in Canadian Politics
POL	411	Canadian Federalism
POL	413F	Provincial and Local Government
SOC	303	Canadian Society

**American Studies**

ANT	241E	Indians of North America
ECO	221	North American Economic History
ENG	218	Major American Authors
ENG	350	American Literature, 1607-1865
GGR	251E	Historical Geography of Northeastern North America
HIS	200E	The United States, 1607-1968
HIS	302E	Race and Ethnic Minorities in American History
HIS	309E	American History — Special Topic
PHL	205F	Contemporary Social Issues
PHL	203s	The Analysis of Propaganda
POL	202	Political Economy and Public Policy
POL	203	American Politics and Government

**Latin American Studies**

- HIS 203E Latin America — Survey  
 HIS 304E The Mexican Revolution, 1910-1940  
 SPA 192 Latin American Civilization and Culture  
 \*SPA 366S Spanish-American Poetry  
 \*SPA 376F Modern Spanish-American Drama

**Third World Studies**

- ANT 204E Social and Political Organizations  
 ANT 209E Religion in Culture  
 ECO 228E Contemporary Economic Problems and Policy  
 ECO 324 Economic Development  
 GGR 131E Introduction to Man's Use of the Environment  
 HIS 203E Latin America — Survey  
 HIS 304E The Mexican Revolution, 1910-1940  
 PHL 283S The Analysis of Propaganda  
 POL 304 Politics of Developing Areas  
 SOC 322E Social Change  
 SPA 192 Latin American Civilization and Culture

**International Relations**

- ECO 228E Contemporary Economic Problems and Policy  
 ECO 328 International Economics and Policy  
 GGR 336ES Political Geography  
 HIS 100E Europe and the World  
 HIS 303E International Relations 1870-1960  
 PHL 205F Contemporary Social Issues  
 POL 306 International Relations  
 POL 327 Comparative Foreign Policy  
 POL 328 International Organization  
 POL 329S Marxism — Leninism  
 POL 415 Seminar in International Politics

**Contemporary Social Issues**

- ANT 205E Technology, Society, and Culture  
 ANT 304E Status and Role in Canadian Indian Societies  
 BIO 130E Man and the Environment  
 BIO 230E Ecology  
 BIO 330E Plant Ecology  
 BIO 430E World Ecosystems  
 BIO 432E Applied Ecology  
 ECO 228E Contemporary Economic Problems and Policy  
 ECO 347E Economic Growth and Planning in a Socialist Economy

ECO	360E	Economic Transformations and Technological Change
ENG	372	Literature and Social Criticism: the Problem of Individualism
GGR	315E	Resource Development
GGR	318ES	Man and Vegetation
GGR	333EF	Transportation Geography
HIS	203E	Latin America — Survey
HIS	302E	Race and Ethnic Minorities in American History
HIS	305E	Industrialization and Ideological Response
HIS	307E	Canadian History from Contemporary Issues
JSP	200	Simulated Society
PHL	100	Introduction to Philosophy
PHL	200s	Reason and Morality
PHL	205F	Contemporary Social Issues
PHL	210F	The State and the Citizen
PHL	213s	The University and Canadian Society
PHL	216F	Deviance and Abnormality
PHL	282s	Language and Communication
PHL	283s	The Analysis of Propaganda
PHL	312s	Philosophy of Law
POL	202	Political Economy and Public Policy
POL	323	Topics in Canadian Politics
POL	327	Comparative Foreign Policy
POL	329s	Marxism — Leninism
POL	411s	Canadian Federalism
POL	413F	Provincial and Local Government
PSY	203EF	Introduction to Social Psychology
PSY	300EF	Population Regulation Mechanisms
REL	211	Communications Media and Religious Consciousness
REL	230E	The Roles of Religion in Human Development
SOC	206E	Social Stratification
SOC	212	Sociology of the Family
SOC	303	Canadian Society
SOC	310	Race and Ethnic Relations
SOC	312F	Population and Society
SOC	322E	Social Change
SOC	326ES	Sociology and Strategy for Social Change

### Urban Studies

GGR	241E	An Introduction to Urban Geography
GGR	341E	Workshop in Urban Geography
POL	413F	Provincial and Local Government
SOC	205	Urban Sociology

**Life Sciences**

All BIO Courses, plus

ANT	100	Introduction to Anthropology
ANT	233E	Introduction to Physical Anthropology
ANT	334E	Skeletal Biology of Prehistoric Peoples
ANT	338E	Primate Paleontology and Anatomy
ANT	339EF	Human Adaptability
CHM	270EF	Biological Chemistry I (same as BIO 270EF)
CHM	271ES	Biological Chemistry II (same as BIO 271EF)
CHM	360E	Biological Chemistry
EPS	330E	Paleoenvironments
GGR	323E	Pleistocene Environments
GGR	331E	Agriculture
PSY	209ES	Physiological Psychology

**Technology and Communications**

ANT	205E	Technology, Society, and Culture
ANT	210EF	Primitive Art
CMM	220ES	Communications I
CMM	320	Communications II
CSC	108F	Computer Programming
ECO	360E	Economic Transformation and Technological Change
GGR	205E	Remote Sensing and Representation of Environment
HIS	305E	Industrialization and Ideological Response
MAT	204EF	Modern Symbolic Logic (same as PHL 250F)
JLP	200EF	Semantics and Linguistic Theory
PHL	202F	Aesthetics
PHL	282s	Language and Communication
PHL	291s	Film Aesthetics
REL	211	Communications Media and Religious Consciousness
SOC	202	Structure of Interpersonal Relations
SOC	304s	Industrial Society

**Religion**

All REL Courses, plus

ANT	209E	Religion in Culture
AST	130EY	Astronomy and Civilization
GLL	190	Greek and Roman Religion and Mythology
GRH	101E	The Classical Ideal and the Classical Experience
PHL	261s	Philosophy of Religion
PHL	290F	Miracles, Mystics, and the Occult

**Thought**

GGR	302ES	Philosophy of Geography
HIS	402E	Historiography Seminar
PHL	314S	Philosophy of Social Science
PHL	315F	Philosophy of History
PHL	347F	Nineteenth Century Philosophy
PHL	348S	Twentieth Century Philosophy
POL	101	Introduction to Political Science
POL	200	History of Political Thought
POL	400F	Twentieth Century Political Thought
REL	302	Architects of Modern Religious Thought
SOC	313	Sociological Theory
UNI	100	Myths and Models

## **Conditions for Academic Standing**

Under the New Programme, each student in full-time attendance in the Faculty of Arts and Science devises his or her own programme by combining together each year *five* full courses chosen to fit the student's interests, subject only to the following:

- (a) All stated prerequisite and co-requisite requirements shall be satisfied.
- (b) Any two half courses are equivalent to one full course; they may be from different subjects.
- (c) An extra full or half-course (not for credit towards a degree) may also be taken in each year, and standing obtained will be recorded.
- (d) The same course (even with number changed) may not be taken twice for credit.

### **First Year Programme**

A student shall be said to have completed a First Year Programme when he has obtained standing in five courses designated as being available to First Year students. A student may not begin any courses not offered to First Year students until he has either:

- (a) completed a First Year programme, or
- (b) has standing in four courses of a First Year programme with an overall average in these four courses of at least 60%.

### **Second Year Programme**

A student shall be said to have completed a Second Year programme when he has obtained standing in ten courses, at least three of which must be 200—or higher—series courses.

### **Third Year Programme and Requirements for Three-Year Degree**

A student shall be said to have completed a Third Year programme and shall be entitled to receive a Bachelor of Arts or Bachelor of Science degree when he has:

- (a) obtained standing in fifteen courses at least eight of which must be 200—or higher—series courses;
- (b) a final mark of 60% or better in each of at least eight of the fifteen courses. Of these eight at least four must be 200—or higher—series courses;
- (c) for a Bachelor of Science degree, included in the eight or more required 200—or higher—series courses at least six courses offered by one or more of the following departments:  
Astronomy, Biology, Chemistry, Geography (to be specified), Geology, Mathematics, Physics, Psychology or certain courses offered by other faculties.

**Note:** A student should notify his College Registrar no later than November 20th if he wishes to receive his degree. When it is conferred, the designation "Bachelor of Arts (Three-Year)" or "Bachelor of Science (Three-Year)" will appear on his academic record.

### **Entry Into a Fourth Year Programme**

A student shall be permitted to enter a Fourth Year Programme only if he has completed the requirements for a bachelor's degree as described above.

### **Fourth Year Programme and Requirements for a Four-Year Degree**

- (a) A student shall be said to have completed a Fourth Year programme and shall be entitled to have the designation "Bachelor of Arts (Four-Year)" or "Bachelor of Science (Four-Year)" entered on his record when he has:
  - (i) Qualified for a 15-course degree;
  - (ii) at the first six attempts completed an additional five courses, no more than one of which may be a 100-series course;
  - (iii) obtained a final mark of 60% or better in each of at least four of the five courses;
  - (iv) for a Bachelor of Science degree, included in the twelve or more required 200—or higher—series courses at least nine courses offered by one or more of the following departments: Astronomy, Botany, Chemistry, Geography (see courses listed under "Third Year Programme"), Geology, Mathematics, Physics, Psychology, Zoology or certain courses offered by other faculties.
- (b) For the degree of Bachelor of Commerce a student must have:
  - (i) qualified for a 15-course degree;
  - (ii) obtained standing in a total of twenty-three courses as outlined in the calendar for the completion of the "Commerce and Finance Programme",
  - (iii) obtained a final mark of 60% or better in each of at least four of the six courses listed for the Fourth Year programme.

### **Refused Registration in the Faculty**

- (a) A student will be refused further registration in the Faculty if:
  - (i) he fails four courses in his first ten attempts, or
  - (ii) he fails five courses in his first fifteen attempts, or
  - (iii) he fails six courses, or
  - (iv) he fails to satisfy the requirements for a three-year degree in his first twenty attempts.
- (b) A student is liable to be *suspended* from the Faculty for one year if he fails a minimum of two courses at the first attempt in any year. All such students must obtain standing in all but one of the failed courses, or substitutes, before registering again as full-time students.

**General Regulations for Standing**

- (a) All students admitted to the eight Colleges of the Faculty will normally be expected to take a full programme of studies (five courses) in the winter day session of each year. With the approval of the College concerned and the Faculty exceptions may be made.
- (b) (i) A student may withdraw from this Faculty without academic penalty up to February 15th. However, if he withdraws in the Second Term, credit will be retained for any First Term half-courses completed and failure noted for any First-Term half-course failed.
- (ii) If exceptional circumstances warrant it a student may be permitted, on petition, to withdraw from not more than one course (or two half-courses) of his programme without academic penalty.
- (iii) A student may withdraw without academic penalty and without petition from an extra first term half-course before November 20th and from an extra full- or second term half-course before February 15th.
- (c) A student who wishes to enrol in three or fewer courses in any session may be admitted to the Division of University Extension. Such a student will normally enrol in winter evening courses or summer day or evening courses, but may, with the permission of the Department concerned, also enrol in winter day courses. He may take a maximum of three courses in a winter session and two in a summer session. Students may transfer from full-time attendance to the Division of University Extension before February 15th.
- (d) Normally, credit towards a degree will not be given for an extra (sixth) course.

**Standing in a Course**

The following scale of marks and grades will be used for all courses and half-courses in all years:

Marks	Grade
80%-100%	A
70% - 79%	B
60% - 69%	C
50%- 59%	D
below 50%	Fail

In the case of half-courses, standing must normally be obtained in each half-course attempted. Marks in two half-courses may not be averaged to produce standing in an equivalent whole course, except where the department(s) concerned specify that this will be permitted for particular and stated combinations of two half-courses.

### **Term Marks and Examinations**

The method of arriving at a final mark for each course (or half-course) will be decided by the Department offering the course. Final examinations, where required, will be conducted by the Faculty in a special period.

Final examinations will normally be held in 100-series courses. Requests for exemption of courses from this regulation shall be brought before the Council. The final mark in the 100-series courses will normally be made up of a term mark and an examination mark with the restriction that not less than one-third or more than two-thirds of the final mark will be based on term work.

### **Aegrotat Consideration**

If the ability of a student to complete a course is affected by illness or domestic problems, a petition may be made through his College Registrar for consideration by the Faculty. If there are adequate grounds for the petition, the Department concerned will determine the status of the work done by the student and the steps, if any, that he must take in order to complete the course.

Such petitions must be filed on or before the last day of the annual (May) or August examinations, together with a medical certificate which includes a statement that the candidate was examined at the time of the illness, or other evidence to support the petition.

### **The August Examinations**

The August examinations are held in the week following the conclusion of summer session classes. They are open to students enrolled in the Summer Session (evening and day) and to students eligible to write supplemental or deferred examinations.

Candidates who are permitted to write supplemental or deferred examinations must submit a completed printed form of application to the Secretary of the Faculty by July 10. After this date an additional fee of one dollar per day to a maximum penalty of \$20 must be paid. No application will be accepted after July 31. They may write these examinations at specified outside centres. Such candidates must make application for this privilege before July 10 and must meet the expenses stated above.

Candidates for the August examinations at outside centres must notify the Secretary of the Faculty before August 1 if they do not wish to write one or more of the subjects for which they applied, otherwise the fee will be forfeited.

### **Attendance and Examinations**

Students proceeding to a degree are required to attend the courses of instruction and all prescribed examinations. A student whose attendance at lectures or laboratories, or whose work is deemed by the Council of the Faculty to be unsatisfactory, may have his registration cancelled at any time by the Council.

No candidate will be admitted to examinations unless the Head of his college certifies that he has complied with all the requirements of the college.

Students may rewrite examinations in one or more courses in which they have standing in order to obtain a higher grade in the course(s) provided that they do so at the next set of examinations. Formal application to rewrite must be made in accordance with the above instructions. No change will be made in the overall standing originally obtained.

### **Supplemental Examinations**

Students in a First Year programme may write a supplemental examination in August in one failed 100-series course if they have a term mark in that course of at least 60%. Failure in a supplemental examination will not count as a second failure, but will necessitate re-enrolment in the failed course or a substitute.

Students in Second, Third and Fourth Years and Special Students will not be permitted to write supplemental examinations in 100-series courses and none will be offered in 200-, 300- and 400-series courses.

Students in all years who fail one subject may remove this condition by taking a course in Summer Evening or Summer Day Extension as Special Students. They may carry only one condition into the next higher year.

### **Degrees**

Students are permitted to qualify for only one degree (Bachelor of Arts, Bachelor of Science, or Bachelor of Commerce) by completing a four-year programme of studies.

A student who qualifies for a Bachelor of Arts or Bachelor of Science degree at the end of his Fourth Year will graduate and receive his diploma at that time unless he has already done so at the end of his Third Year.

### **Transcripts**

Copies of a student's transcript of academic record will be issued at his request, subject to reasonable notice and a nominal copying fee.

## Extension Courses Offered at Erindale College

Students in degree programmes of the Division of University Extensions are required to apply for admission to the Director of Admissions, University of Toronto. The deadlines are:

Winter Session — August 1, 1971

Summer Evening Session — April 1, 1971

Summer Day Session — May 15, 1971

The courses that are planned to be offered are those listed below:

R=Thursday

### Programme for Summer Evening Session, 1971

ECO	100	Intro. Economics	T,R	F.B. Mayer
ENG	212	Shakespeare	T,R	R.E. Rower
FRE	271	Language Practice	T,R	Mrs. G. Chesneau
GGR	101EF-102ES	Physical Geography	T,R	A.R. Byrne
GGR	203EF-204ES	Intro. Urban Geography	M,W	H. Andrews & R. Putnam
MAT	110EF	Intro. Calculus	M,W	J.E. LeBel
	120ES	Finite Math	M,W	J.E. LeBel
PHL	100	Intro. Philosophy	T,R	W.J. Huggett
POL	100	Intro. Can. Gov't.	M,W	Miss J. Esbrey
PSY	100	Intro. Psychology	M,W	L. Krames
SOC	202	Interpersonal Relations	T,R	A.M. Bennett

April 1 — Last day for new and special students to apply for admission.

April 15 — Last day to enrol in courses.

**Note:** All summer evening classes meet twice weekly for 2-hr. sessions from May 17 to August 13. (Examinations August 16 - August 20) Half courses terminate or begin at the end of June. Classes begin at 7.30 p.m.

### Programme for Summer DAY Session, 1971

<i>Subject</i>		<i>Room</i>	<i>Instructor</i>	<i>Time</i>
ANT	233	Intro. Physical Ant.	250 F.J. Melbye	9.00 a.m.-11.00 a.m.
AST	100	Intro. Astronomy	239A J.R. Percy	9.00 a.m.-12.00 noon
FRE	120	Intro. Univ. Studies	271 E.W.D. Laryea	9.00 a.m.-11.00 a.m.
MAT	110EF	Intro. Calculus	298 S.M. Trott	9.00 a.m.-11.00 a.m.
	120ES	Finite Math	298 S.M. Trott	9.00 a.m.-11.00 a.m.
PSY	100	Intro. Psych.	245 I.M. Spigel	9.00 a.m.-11.00 a.m.
PSY	213EF	Comparative Psych.	241 T.M. Alloway	11.30 a.m.- 1.30 p.m.
	216ES	Exp. Design & Theory	241 T.M. Alloway	11.30 a.m.- 1.30 p.m.

REL 230EF	Roles of Religion	270	L.J. Elmer	11.30 a.m.– 1.30 p.m.
304ES	Religion and Imaginative Literature	270	D.E. Belyea	11.30 a.m.– 1.30 p.m.
SOC 205	Urban Sociology		A.T.R. Powell	9.00 a.m.–11.00 a.m.

**Note:** All Summer DAY classes meet for 2-hour sessions, 5 days weekly for 6 weeks from July 5 to August 13. (Examinations August 16 to August 20)

### Program for Evening Session, 1971–72 Academic Year

<i>Subject</i>	<i>Day</i>	<i>Instructor</i>
ANT 220EF–221ES	M	F.J. Melbye
ANT 241E	R	A. Mohr
ECO 100	M	M.J. Hare
ECO 204F–205S	W	J.E. Floyd
ENG 108	T	D.I. Lancashire
ENG 212	R	R.E. Rower
ENG 218	M	T.H. Adamowski
FRE 120	W	D. Trott
GGR 101EF–102ES	R	R. Putnam
GGR 203EF–204ES	R	H. Andrews
HIS 301E	T	D.P. Morton
MAT 110EF–120ES	T	J.E. LeBel & S.M. Trott
PHL 100	W	W.J. Huggett
POL 203	W	M. Landauer
POL 306	R	B. Kovrig
PSY 100	M	T.M. Alloway/L. Krames
PSY 213EF–215ES	M	T.M. Alloway/L. Krames
PSY 216EF–353ES	T	I.M. Spigel
PSY 368EF–369ES	W	K.R. Blankstein
REL 230E	M	L.J. Elmer
SOC 101	W	Mrs. M.H. Cooper
SOC 202	R	A.M. Bennett
SOC 324EF–320ES	W	A.T.R. Powell

**Note:** Classes meet once a week for the academic year.

## COURSE ABBREVIATIONS

### Subject Abbreviations

ANT	Anthropology	GRH	Greek & Roman History (See Classics)
APM	Applied Mathematics (See Mathematics)	GRK	Greek (See Classics)
AST	Astronomy	HIS	History
BIO	Biology (Botany, Zoology and Microbiology)	ITA	Italian
CHM	Chemistry	JSP	Simulated Society (See Inter- disciplinary Courses)
CSC	Computer Science (See Mathematics)	LAT	Latin (See Classics)
CMM	Communications (See Inter- disciplinary Courses)	MAT	Mathematics
COM	Commerce	PHL	Philosophy
DRA	Drama (See Interdisciplinary Courses)	PHY	Physics
ECO	Economics	POL	Political Science
ENG	English	PRT	Portuguese (See Spanish)
EPS	Earth & Planetary Sciences (Geology and Geophysics)	PSY	Psychology
FRE	French	REL	Religious Studies
GER	German	SLA	Slavic Languages & Literature (Russian)
GGR	Geography	SOC	Sociology
GLL	Greek & Latin Literature (See Classics)	SPA	Spanish
		STA	Statistics (See Mathematics)
		UNI	University

### Letter Abbreviations

E	Course given only at Erindale
F	Half course—Fall term only
L	Lecture hours
P	Practical or laboratory hours
P.I.	Permission of Instructor
S	Half Course—Spring term only
T	Tutorial hours
Y	Half course—i.e. indicates a half course given throughout both terms
/	means “or”
&	means “and”
(I)	may be taken by first year students
TBA	to be announced

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## Subjects and Courses

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### ANTHROPOLOGY

Faculty adviser: Professor A. Mohr

Anthropology is the study of human biology and culture and their connections. *Physical Anthropology* focuses on the evolution of man and his nearest primate relatives, as revealed by fossil remains, and on the constitution, physiology and variation of living populations. *Cultural Anthropology* is the study of the way of life of peoples throughout the world, their economy, social organization, religion, language. Particular emphasis is given to non-western groups. Conclusions are drawn about interrelationships of cultural elements, man's relationship to the environment and processes of culture change. Physical evidence (habitations, tools, food remains) of groups no longer extant are investigated through *Archaeology* to reconstruct the cultures of the past and to trace their development from earliest times.

The Erindale Anthropology programme offers the student the general background necessary for the advanced training required for professional positions. It is the special concern of the faculty to introduce students to research methods of physical and cultural anthropology including archaeology and to involve them in the research programmes of the department. Students planning an anthropology concentration should consult anthropology faculty members for advice.

Anthropologists are employed as faculty in universities and colleges, as researchers in museums and by government. For additional information see *Anthropology as a Career* by Wm. C. Sturtevant, available at the Erindale College Library.

- ANT 100E    **Introduction to Anthropology, 2L,1T**  
A survey of the biological and cultural aspects of man and his behaviour, including the evolutionary development of man and the scope of his present variation; the concept of culture, its various aspects and processes and origin, development and differentiation of cultures from the archaeological record.  
*Instructor:* F. J. Melbye and TBA
- ANT 201EF    **Peoples of the Old World II, 2L**  
(I)    Comparative ethnological survey of these areas. Contributions of the study of these cultures to general problems and theories of anthropology.  
*Instructor:* TBA
- ANT 202ES    **Peoples of the Old World II, 2L**  
(I)    Area to be announced.  
*Instructor:* TBA
- ANT 204E    **Social and Political Organization, 2L,1T**  
(I)    A general survey emphasizing non-western peoples.  
*Instructor:* Staff

- ANT 205E **Technology, Society and Culture, 2L,1P** (Not offered in 1971-72)  
The role of technology in social and cultural change, including an introduction to basic technology and the history of technological development.  
*Instructor:* R. M. Vanderburgh
- ANT 208E **Folklore, 2L**  
(I) Description and comparison of the types of folklore in various culture areas with discussion of interpretations of the function of folklore. Laboratory project on modern folklore.  
*Pre-requisite:* P.I.  
*Instructor:* Staff
- ANT 209E **Religion in Culture, 2L**  
(I) An anthropological view of religious behaviour with emphasis on the religions of non-western peoples.  
*Instructor:* R. M. Vanderburgh
- ANT 210EF **Primitive Art, 2L**  
(I) Comparison of plastic and graphic arts of non-literate cultures and the meaning and function of art in specific cultural contexts.  
*Instructor:* Staff
- ANT 220EF **Archaeological Field Methods, P:** Saturday field trips: 8 a.m.-5 p.m.  
(I) Laboratory: 2 hours  
Instruction in archaeological field techniques through excavation of a prehistoric site located near Erindale College and by laboratory instruction.  
*Pre-requisite/Co-requisite:* ANT 100 and P.I.  
*Instructor:* A. Mohr
- ANT 221ES **Archaeological Laboratory Analysis, 1L,P:** To be arranged.  
(I) Analysis and description of archaeological material; primitive technology and archaeological interpretation.  
*Pre-requisite:* ANT 220EF and P.I.  
*Instructor:* A. Mohr
- ANT 225E **North American Archaeology, 2L,1P** (Not offered in 1971-72)  
(I) A survey of culture history from the first appearance of man in North America until the coming of the Europeans. Selected readings provide the broad outline; lectures will discuss methods of analysis and offer detailed summaries of the evidence of selected sites and their interpretation.  
*Instructor:* A. Mohr

- ANT 226E **Old World Prehistory, 2L**  
 (I) Earliest evidence for human culture, development, differentiation and diffusion of cultures in the Old World through almost 2,000,000 years. Interpretation of man's cultural adaptations from material remains of that behaviour.  
*Instructor: L. L. Sample*
- ANT 233E **Introduction to Physical Anthropology, 2L,2P**  
 An introduction to physical anthropology and human biology. Lectures will discuss human evolution, variation and biological patterns. A laboratory is offered to familiarize the student with human biological materials and techniques.  
*Pre-requisite: ANT 100/P.I.*  
*Instructor: B. A. Sigmon*
- ANT 241E **Indians of North America, 2L, 1P**  
 (I) Survey of native cultures and discussion of the role of environmental and historical factors.  
*Instructor: A. Mohr*
- ANT 304E **Status and Role in Canadian Indian Societies, 2T**  
 A seminar course examining variables in the acculturative situation. Emphasis on individual research.  
*Pre-requisite: ANT 204/ANT 241 and P.I.*  
*Instructor: R. M. Vanderburgh*
- ANT 320EF **Advanced Archaeological Field Methods, P: Saturday field trips 8 a.m.-5 p.m. Lab. 2 hours**  
 Instruction in archaeological field techniques, laboratory preparation, supervision of field and laboratory work. (Conducted concurrently with ANT 220EF)  
*Co-requisite: ANT 220EF and P.I.*  
*Instructor: A. Mohr*
- ANT 321ES **Advanced Archaeological Analysis, P: To be arranged.**  
 Analysis of archaeological material and report preparation.  
*Pre-requisite: ANT 220ES and P.I.*  
*Instructor: A. Mohr*
- ANT 334E **Skeletal Biology of Prehistoric Peoples, 2L,2P**  
 The course includes the method and technique of recovering, preserving, recording and analysing skeletal remains. The human skeleton will be studied in detail, and practical experience will be offered in the analysis of a skeletal population.  
*Pre-requisite: P.I.*  
*Instructor: F. J. Melbye*

- ANT 338E **Primate Palaeontology and Anatomy**, 1L,3P (Not offered in 1971-72)  
A survey of the palaeontological evidence and the evolution of the Order Primates, including the study of the soft and skeletal anatomy of representatives of different taxa of living primates.  
*Pre-requisite:* ANT 233E/BIO 251E and P.I.  
*Instructor:* B. A. Sigmon
- ANT 339EF **Human Adaptability**, 3L  
A survey of the nature and range of biological variation in modern man.  
*Pre-requisite:* ANT 100/ANT 233/P.I. (P.I. required for second year students)  
*Instructor:* B. A. Sigmon
- ANT 397EY **Independent Study**, T: To be arranged  
Supervised reading on selected anthropological topics.  
*Pre-requisite:* P.I.  
*Instructor:* Staff
- ANT 398E **Independent Reading**, T: To be arranged  
Supervised study of selected anthropological topics.  
*Pre-requisite:* P.I.  
*Instructor:* Staff
- ANT 399E **Independent Research**, T: To be arranged  
Supervised research in anthropology.  
*Pre-requisite:* P.I.  
*Instructor:* Staff

## ASTRONOMY

Faculty Adviser: Professor J. R. Percy

Astronomy, the Queen of Sciences, is wide-ranging in its content and in its implications. It embraces such topics as the origin and evolution of the planets, stars, galaxies and universe, the origin of life on earth and elsewhere, the behaviour of matter in varied environments, and, in general, the influence of the universe on man's thinking down through the ages. Because of its breadth, it has always formed a valuable part of a general education.

Five half-courses in astronomy are offered at Erindale College; they can be combined with other courses and with each other in a variety of ways, to suit the interests of the individual student. AST 110EY is a lecture half-course which introduces the student, in a systematic way, to many facets of astronomy. AST 110EY may be taken by itself: it may also be profitably combined with AST 120EY by students who are interested in astronomy as a science, or with AST 130EY by students

who are more interested in the cultural aspects of astronomy. At a more advanced level, AST 310EF and AST 320 ES may be taken, together or separately. They are intended for students with a serious interest in science (mathematics, physics, astronomy or earth and planetary sciences) but require no previous introduction to astronomy.

**AST 110EY    An Introduction to Astronomy, 1L**

An account of the nature, origin and evolution of the solar and stellar systems, and the present conception of the structure of the universe. (May not be combined with AST 100 or AST 220 previously offered.)

*Instructors:* J. R. Percy and R. Racine

**AST 120EY    Practical Astronomy for Science Students, 2P**

An introduction to the use of telescopes and other astronomical instruments, and to the analysis and interpretation of astronomical data. (May not be combined with AST 130EY or AST 100 or AST 220 previously offered.)

*Pre-requisites:* XIII MAT A and PHY, or P.I.

*Co-requisite:* AST 110EY

*Instructor:* R. Racine

**AST 130EY    Astronomy and Civilization, 2T**

An investigation, through seminars, essays and student projects, of the relationship between astronomy and civilization. Astronomy, astrology, mythology and religion in the ancient world. The history and philosophy of astronomy from 300 BC to the present. Astronomy in literature and art. The relevance of astronomy to science in general. (May not be combined with AST 120EY, or AST 100 or AST 220 previously offered.)

*Co-requisite:* AST 110EY

*Instructor:* J. R. Percy

**AST 310EF    Solar System Astrophysics, 2L**

The physical nature of the sun, planets, satellites and other constituents of the solar system. Their motion, structure, origin and evolution. (May not be combined with AST 220 previously offered.)

*Co-requisite:* At least one 300-level Physics course/P.I.

*Instructor:* R. Racine

**AST 320ES    Stellar and Galactic Astrophysics, 2L**

The structure, origin and evolution of the sun, stars, galaxies and universe. Introduction to relativity and cosmology. (May not be combined with AST 220 previously offered.)

*Co-requisite:* At least one 300-level Physics course/P.I.

*Instructor:* J. R. Percy

## BIOLOGY

Faculty Advisers: Professors P.F. Maycock and P.J. Pointing

Biology is the science of living organisms—their kinds and relationships, origins and evolution, structure and development, their functions and mutual relationships in the environments in which they occur. Biology relates to such major human problems as population, conservation and pollution. Studies of the interaction of plants, animals and environment show how famine and disease follow the unwise use of habitat and how pollution aggravates these problems. A study of Biology is a key to the solution of many of these world problems.

Botanists, microbiologists and zoologists at Erindale cooperate closely in organizing courses and programmes in *Biology* which stress the relationships of plants and animals in terms of form, function, environment and microstructure, from the ecosystem, whole plant or animal down to the molecular level. *Botany* is concerned with plants, their structure, functions and basic relationships to the environment. The food we eat, the air we breathe, the drugs that heal us, are all ultimately tied to the relation of plants to the natural environment. Plants are the basis of vast and complicated food chains in the oceans, lakes and rivers as well as in terrestrial ecosystems. Plants may be studied from many points of view. One approach is to subdivide the subject on the basis of the different classes of plants; another approach is to deal with physiology, genetics, ecology, taxonomy, plant geography and systematics. *Zoology* is the science concerned with the study of the structure, the functioning and the interrelationships of animals. The general field of zoology is divided into a large number of special areas of study and research. One way to subdivide zoology is according to the classification of animals; another way is to divide it by methods of study such as: cell biology, radiation biology, physiology, genetics, ethology (animal behaviour), and population biology. *Microbiology* is the study of minute living forms that can be seen as individuals only with the microscope and is concerned with small *plant* forms (algae, molds, yeasts and bacteria), single-celled *animals* (protozoa) and viruses. Microbiology is not only considered largely an applied field concerned with health or economic welfare, but with the recent development of Molecular Biology, Microbiology has also been drawn to the centre of the biological stage. It deals with bacteriology, virology, immunology, applied microbiology and molecular biology.

Careers in biology are in research, in teaching at all levels, and in government and industry. Professional careers in biology require specialization at the undergraduate level, and usually an advanced degree. Students should bear this in mind when planning programmes. Students who intend to become high-school biology teachers are urged to arrange programmes to meet the requirements of the High School Assistant's Certificate, Type A, Ontario Department of Education.

Staff will assist students in organizing an appropriate group of courses according to their interests or a specialized programme in biology.

**BIO 100E      The Study of Life, 2L,3P**

Organized around three major abstract concepts: Time (Evolutionary Processes and Products), Energy (Its Procurement and Utilization by Living Organisms), and Information (The Organization of living Systems). It presents an integrated study of life at four levels: molecular, cellular, organismal, and social; leading the student to an awareness of the five unique characteristics of living material, i.e. Organized Structure, Specialized Function, Growth and Development, Heredity, and Evolution. Practical sessions will introduce the student to a wide range of material and techniques. Recommended for all students considering subsequent courses in Biology.

*Instructors:* G. R. Thaler and Staff

**BIO 110E      Field Biology, 5P**

A practical field and laboratory course designed to acquaint the student with plants and animals in the local environment. In the field observation and recognition will be emphasized. Identification and collection techniques will be covered in the laboratory. Students will be required to make a proper collection of some group of animals or plants.

*Instructors:* D. L. Gibo and P. W. Ball

**BIO 130E      Man and the Environment, 2L,1T,2P**

The ecological problems confronting humanity will be examined on both a local and global scale. The biological basis of the population problem, pollution and status of resources will be stressed. Divergent opinions will be expressed by outside speakers. Field trips will be arranged and opportunities provided for each student to follow up topics of interest.

*Instructors:* R. Frost and P. J. Pointing

**BIO 230E      Ecology, 2L,3P**

The study of the interrelations of plants and animals with the environment will include the composition, structure, and function of natural ecosystems at the population, community, and biosphere levels of organization. Other topics include energy flow, physical factors, population processes and pollution.

*Pre-requisite:* BIO 110E recommended preparation and P.I.

*Instructors:* P. F. Maycock, P. J. Pointing, W. T. Geiling and W. G. Sprules

**BIO 240E      Genetics, 2L,3P**

A course presenting current concepts in genetics; Examples are drawn from microbes, plants, animals and viruses to illustrate: the molecular

structure of the gene, mechanisms of gene action and gene regulation, levels of genetic organization in different life forms, basic population genetics, and genetical aspects of evolution. Practicals will include both plant and animal material and will involve carrying out both directed and independent experiments. Much of the laboratory work will involve *Drosophila*.

*Pre-requisite:* BIO 100E/110E

*Co-requisite:* BIO 260E recommended

*Instructors:* D.L. Gibo and TBA

**BIO 241E Cell Biology, 2L,3P**

Cell structure and function. Cell organization at the molecular and organelle level will be considered in bacterial, animal and plant cells. Topics include the structure of plasma membranes, nuclei, mitochondria, plastids and other organelles, and localization of the chemical reactions in these structures. In the laboratory the student will become familiar with the current techniques and instruments of cell and molecular biology.

*Pre-requisite:* BIO 100E

*Co-requisite:* BIO 270EF, 271ES recommended

*Instructor:* TBA

**BIO 250E Plant Form and Function, 2L,3P**

A survey of the major plant groups from the Fungi and Algae to Flowering forms. The structure and life history of representatives are considered together with a discussion of the function of the major tissues and organs. The evolution of plants is discussed with particular reference to fossils.

*Pre-requisite:* BIO 100E/P.I.

*Instructor:* P. W. Ball

**BIO 251E Animal Form and Function, 2L,3P**

How animals are structurally designed to cope with the environment is the main theme. The "capture" of food, the processing and distributing systems, and locomotion are some of the topics treated comparatively and from an evolutionary point of view, drawing examples from both vertebrates and invertebrates.

*Pre-requisite:* BIO 100E and P.I.

*Instructors:* G. K. Morris and P. J. Pointing

**BIO 252E Developmental Biology, 2L,3P**

Processes of growth and development in plants and animals. Laboratories emphasize the descriptive embryology of the chick and the morphogenesis of plants and include techniques of tissue

preparation. Differentiation, metamorphosis and regeneration are additional topics.

*Pre-requisite:* BIO 100E/120

*Instructor:* TBA

**BIO 260E Biometrics, 2L,3P**

An introduction to the theory and application of statistics and Biology. Topics will include probability theory, descriptive statistics, sampling theory, hypothesis testing, analysis of variance, experimental design, correlation and regression, and non-parametric methods. Collection and analysis of biological data will be carried out in the laboratory.

*Instructor:* W. G. Sprules

**BIO 270EF Introduction to Biological Chemistry, 2L,3P**

(Same as CHM 270EF)

Introduction to the physical properties of solutions and interfaces with emphasis on techniques and theories pertinent to the chemistry of living systems. Colligative properties of solutions, interfacial phenomena, thermo-dynamics and equilibria, elementary kinetics, oxidation and reduction will be studied.

*Co-requisite:* CHM 235EF

*Instructors:* B. I. Roots, P. V. Rangnekar, M. A. Winnik, A. Guha

**BIO 271ES Introduction to the Chemistry of Natural Products, 2L,3P**

(Same as CHM 271ES)

A brief treatment of many classes of biologically important naturally occurring organic compounds. Each class of compound will be considered from the standpoint of structure, properties and synthesis. Among the types of compounds considered will be carbohydrates, amino acids and proteins, lipids, steroids, alkaloids and nucleic acids.

*Pre-requisite:* CHM 235EF, and BIO 270EF recommended

*Instructors:* B. I. Roots, P. V. Rangnekar, M. A. Winnik, A. Guha

**BIO 320E Plant Physiology, 2L,3P**

Study of principal physiological processes of plants and the influence of environmental factors on these processes. Topics will include: water relations, mineral nutrition, translocation, photosynthesis, respiration, general metabolism, growth and development.

*Pre-requisite:* BIO 100E, CHM 120E

*Instructor:* P. V. Rangnekar

**BIO 321E Animal Physiology, 2L,3P**

A comparative approach will be taken to the study of physiological processes in animals. Emphasis will be placed on the understanding of underlying principles. Topics will include respiration, excretion,

osmoregulation, ionic regulation and the physiology of muscle and nerve.

*Pre-requisite:* BIO 100E, CHM 120E, BIO 270EF and BIO 271ES recommended.

*Instructor:* B. I. Roots

**BIO 322EF Animal Behaviour I: Social Factors, 2L,3P**

(Formerly Ethology BIO 322EF)

A lecture and practical course dealing with the organization of animal societies, communication and sensory coding, behavioural genetics and learning, and the physiological basis of behaviour.

*Pre-requisite:* BIO 100E/P.I.

*Instructor:* G. K. Morris

**BIO 323ES Animal Behaviour II: Physical Factors, 2L,3P**

A lecture and practical course dealing with the responses of animals to environmental factors such as light, temperature, humidity, etc.

*Pre-requisite:* BIO 100E/P.I.

*Instructor:* P. J. Pointing

**BIO 330E Plant Ecology, 2L,3P**

The relationships of plant species, populations and complexes on the sociological, environmental and physiological levels. Practical field work and laboratory studies and experimentation is included. Provides a basis for practical training in conservation and environmental quality research.

*Pre-requisite:* BIO 230E recommended

*Co-requisite:* BIO 110E recommended

*Instructors:* P. F. Maycock and R. Frost

**BIO 331E Animal Ecology, 2L,3P (Not offered in 1971-72)**

Comparative studies of a variety of aquatic and terrestrial habitats will be made both in the field and in the laboratory at the organism, population, community and ecosystem levels of organization. Natural history, population dynamics, energy flow and simple models will be used in describing the role of animals mainly invertebrates, in the environment.

**BIO 332E Freshwater Biology, 1L,4P**

A survey of the freshwater algae, rooted aquatic plants, zoöplankton, benthic fauna, and fish. The taxonomy, life histories and ecology of local species will be emphasized.

*Pre-requisite:* BIO 110E/P.I.

*Instructor:* W. T. Geiling

- BIO 350E Taxonomy and Evolution of Flowering Plants, 2L,3P**  
 A consideration of the principles of classification of living organisms with particular emphasis on flowering plants. Topics to be discussed include "The Species Concept", "Polyploidy", "Geographical Variation" and "Numerical Taxonomy". The laboratory work will involve an examination of the main families of flowering plants and the study of variation in naturally occurring plant populations.  
*Pre-requisite:* BIO 110E, BIO 240E/P.I.  
*Instructor:* P. W. Ball
- BIO 370E General Microbiology, 2L,1P**  
 Historical development of microbiology; structure and ultrastructure of micro-organisms; physiology and nutrition of bacteria; growth and cultivation of bacteria; nature of viruses; bacteriophage and a limited survey of animal viruses and their properties; micro-organisms in medicine, industry and agriculture; immunology and immunochemistry, microbial physiology, microbial genetics and microbial ecology.  
*Pre-requisite:* BIO 100E/120  
*Co-requisites:* CHM 340E, CHM 360E, BIO 241E  
*Instructor:* A. Guha
- BIO 422ES Acoustical Biology, 2L,3P**  
 The role of sound in animal communication. Mechanisms of sound production and reception; the signal function of sounds. Recording and analysis techniques.  
*Pre-requisite:* BIO 322EF/P.I.  
*Instructor:* G. K. Morris
- BIO 423EF Radioisotopes in Biology, 2L,3P**  
 Radioisotopes, their production and properties useful in biological or biochemical investigations. Principles of tracer methodology. Application of tracer techniques in translocation, assimilation, intermediary metabolism, etc. Measurement of radioactivity using different counting systems, radioautography, etc.  
*Pre-requisite:* BIO 100E and CHM 120E, and P.I.  
*Instructor:* P. V. Rangnekar
- BIO 430E World Ecosystems, 2L,3P (Not offered in 1971-72)**  
 A systematic investigation of the major plant and animal formations of the world. The composition, structure, distribution, productivity and dynamic aspects, will be viewed in relation to major environmental influences. The importance of these ecosystems in cultural, economic, conservation, and social terms will also be considered.  
*Pre-requisite:* BIO 230E, 330E or 331E/P.I.  
*Instructor:* P. F. Maycock

**BIO 432E Applied Ecology, 2L,3P**

A study of the ecological implications of principles and techniques employed in the utilization and conservation of natural resources. Examples will be chosen mainly from agriculture, forestry, fish and wildlife exploitation and recreation. Problems involved in the establishment of natural conservation areas, the multiple use of resources and methods of land use planning will be discussed. The course will include lectures, seminars, field work and individual projects.

*Pre-requisite:* BIO 230E

*Co-requisite:* Recommended preparation: BIO 330E/331E

*Instructor:* R. A. Frost (co-ordinator)

**BIO 440EF Population Genetics, 2L,3P**

Behaviour of genes in populations, mechanisms for maintaining genetic diversity, consequences of population size, inbreeding and natural selection are some of the topics that will be covered. The laboratory work will include population studies and simple model testing. Course will alternate with BIO 442EF.

*Pre-requisite:* BIO 100E/110E

*Instructor:* D. L. Gibo

**BIO 441ES Electron Microscopy, 1L,4P**

An introduction to the theory and practice of electron microscopy and its application to the study of the ultrastructure of cells and tissues.

*Instructor:* B. I. Roots

**BIO 442EF Evolution, 2L,3P (Not offered in 1971-72)**

Major features and strategies of evolution will be emphasized.

Mechanisms of speciation, mimicry, character displacement and genetic drift are some of the topics that will be covered. Labs include selection experiment, model testing, and individual presentations.

Course will alternate with BIO 422ES

*Pre-requisites:* BIO 100E/110E; BIO 240E recommended

*Instructor:* D. L. Gibo

**BIO 460ES Mathematical Ecology, 2L,1½ T**

This course will deal primarily with mathematical models describing ecological phenomena such as competition, predation, species diversity, and optimal strategies. Different approaches to modelling will be compared with respect to precision, generality, and realism. Instruction will combine lectures and informal seminars.

*Pre-requisite:* 100-series MAT course, BIO 230E/P.I.

*Instructor:* W. G. Sprules

**BIO 470E Molecular Biology, 2L,1P**

To provide a background for students of biology and for physical sciences for further study of modern biology and other interdisciplinary sciences. The course will deal with the structure, function and biosynthesis of nucleic acids and proteins; cell permeability; bioenergetics; regulatory mechanisms in bacteria; microbial and viral genetics; Viruses—animal and bacterial viruses in detail; immunology and immunochemistry; modern physico-chemical methods in studies of biomolecules, etc.

*Pre-requisites:* BIO 370E/CHM 270EF/CHM 271ES

*Co-requisites:* BIO 370E/CHM 360E

*Instructor:* A. Guha

**CHEMISTRY**

Faculty Adviser: Professor I. W. J. Still

Chemistry is both a challenging intellectual pursuit and a dominant force in shaping modern civilization. Modern chemistry provides an understanding of the structures and properties of atoms and molecules and uses this knowledge to interpret and predict the changes associated with chemical reactions. In addition to its vital role in modern science-based industry, chemistry has an increasingly important bearing on other sciences such as biology, the medical sciences, psychology, geology, metallurgy and astrophysics. This is reflected in the courses offered in the recommended programme in Chemistry. The basic core of chemistry courses, with ancillary Mathematics and Physics, will enable the student to choose courses at the fourth year level reflecting his specific area of interest.

The Chemistry programme offered at Erindale College is a very suitable preparation for those intending to teach chemistry in High School (Type A certificate); continuation into graduate work or entry into industry. It also includes courses for those working in cognate disciplines such as biology and earth and planetary sciences.

**Chemistry Specialist Programme at Erindale**

**Year I** CHM 120E, MAT 135\*/MAT 110EF and 120ES, PHY 120E\*/PHY 110.

**Year II** CHM 220E†, 235EF, 236S, MAT 235E/MAT 244F and APM 246ES, PHY 220E/another 200-series course in Science/Mathematics.

**Year III** CHM 320E#, 330E, 340E, and two courses from CHM 350E, CHM 360E, another Science or Mathematics.

**Year IV** CHM 410, 415, 419.

\*Recommended for this programme

†For students interested in biological areas of chemistry, this course may be deferred until Third Year and substituted in Second Year by e.g. CHM 270EF and 271ES.

#If CHM 220E is taken in Third Year, this course may be deferred until Fourth Year.

*Chemistry courses at Erindale which must be taken by an intending specialist*

CHM 120E, 220E, 235EF, 236S, 320E, 330E, 340E, 410, 415, 419

N.B. This list also satisfies the current Type A Certificate of Education requirements if, in addition, a further 5 courses in Chemistry *or another Science (including a course in calculus)* are taken during a four-year programme.

**CHM 120E Basic Concepts of Chemistry, 2L,1T,1½ P**

Molecular structures and geometry, chemical bonding and chemical reactions are discussed on the basis of insight into the behaviour of atoms and molecules that comes from descriptive quantum mechanics, chemical kinetics, and chemical thermodynamics. The Periodic Table; introduction to organic and inorganic chemistry; chemical equilibria; reaction mechanisms and chemical reactivity.

*Pre-requisite:* Gr. XIII CHM and MAT A/P.I.

*Co-requisite:* MAT 135 and PHY 120E recommended for those intending to specialize in chemistry.

*Instructor:* E. A. Robinson

**CHM 220E Introduction to Physical Chemistry, 2L,1T**

Description of physicochemical systems. First and Second Laws of thermodynamics. Equilibrium and the Third Law. Kinetic Theory. Reaction kinetics and the elucidation of reaction mechanisms. Electrochemistry and electrochemical cells. (May not be combined with PHY 221E (Thermal Physics) )

*Pre-requisite:* CHM 120E

*Co-requisite:* MAT 235E/MAT 244F and APM 246ES

*Instructor:* D. R. Clark

**CHM 235EF Introduction to Organic Chemistry, 2L,4P**

The synthesis and reactivity of the major types of organic compounds. Elementary aspects of reaction mechanism, stereochemistry, and spectroscopic methods of structure determination. The laboratory is intended to complement the lecture material and will introduce students to the theory and practice of basic laboratory techniques and methods of synthesis of organic compounds.

*Pre-requisite:* CHM 120E

*Instructor:* I. W. J. Still

**CHM 236ES Introduction to Inorganic Chemistry, 2L,4P**

Ionic bonding and lattice structures and energies. Solution chemistry and solubilities. Covalent bonding and stereochemistry. Descriptive chemistry of hydrogen and the first period. Introduction to transition metal chemistry and metal complexes.

*Pre-requisite:* CHM 235EF

*Instructors:* G. A. Ozin and A. J. Poë

**CHM 270EF Introduction to Biological Chemistry, 2L,3P**

(Same as BIO 270EF)

Introduction to the physical properties of solutions and interfaces with emphasis on techniques and theory pertinent to the chemistry of living systems. Colligative properties of solutions, interfacial phenomena, thermodynamics and equilibria, pH and buffers, elementary kinetics, oxidation and reduction.

*Co-requisite:* CHM 235EF*Instructors:* Chemistry and Biology staff**CHM 271ES Introduction to the Chemistry of Natural Products, 2L,3P**

(Same as BIO 271ES)

A brief treatment of many classes of biologically important, naturally occurring, organic compounds. Each class of compounds will be considered from the standpoint of structures, properties, and synthesis. Among the types of compounds considered will be carbohydrates, amino acids and proteins, lipids, steroids, alkaloids, and nuclei acids.

*Pre-requisite:* CHM 235EF (CHM 270EF recommended)*Instructors:* Chemistry and Biology staff**CHM 320E Physical Chemistry, 2L,4P (8 hours every second week)**

Basic postulates of quantum mechanics applied to molecular spectroscopy. Wave mechanics and the chemical bond. Statistical mechanics. The solid and liquid states. Physical chemistry of surfaces. Photochemistry. Students will undertake 1 or 2 major laboratory projects during the year.

*Pre-requisite:* CHM 220E, MAT 235/MAT 244F and APM 246ES and P.I.*Co-requisite:* MAT 335, PHY 311 recommended*Instructor:* D. R. Clark**CHM 330E Advanced Inorganic Chemistry, 2L,4P**

Chemical applications of Group Theory and spectroscopy. Descriptive chemistry of the main group elements. Theories of bonding in transition metal complexes. Chemistry of metal carbonyls and nitrosyls, etc. Organometallic compounds and hydrides.

Thermodynamics of complex formation. Mechanisms of reactions of metal complexes. Descriptive chemistry of transition metals. The laboratory course covers a wide range of synthetic and instrumental techniques and is associated with a programme of tutorials.

*Pre-requisite:* CHM 236ES and P.I.*Instructors:* A. J. Poë and G. A. Ozin

**CHM 340E Advanced Organic Chemistry, 2L,4P**

The stereochemistry of organic compounds in relation to their physical and chemical properties and to the factors affecting rates of reaction. Mechanistic aspects of organic reactions. The application of both stereochemical and mechanistic considerations to the synthesis of polyfunctional organic compounds in both lecture and laboratory. Organic compounds of nitrogen, sulfur, silicon and phosphorus.

*Pre-requisite:* CHM 236ES and P.I.

*Instructors:* I. W. J. Still and M. A. Winnik

**CHM 350E Instrumental Methods in Chemistry, 1L,1T,3P**

This course is designed to provide an appreciation of the scope and limitations of some of the more useful techniques of instrumental analysis. A range of instrumental experience is available in the laboratory to allow the student to direct his training according to his interests and/or needs. The lecture course will cover the basic theory behind many of the commoner instrumental methods, and will discuss general methods of approach to analytical problems and treatment of the results. (Biology, Earth Sciences and Physics students would find this course useful.)

*Pre-requisite:* CHM 236ES

*Instructor:* R. G. Lee

**CHM 360E Biological Chemistry, 2L,1T**

A lecture course in general biochemistry treating physical chemistry of proteins, enzyme reaction kinetics and mechanisms, metabolic processes and control mechanisms, biosynthetic pathways of small molecules, nucleic acids and protein synthesis, and bioenergetics. In the spring term each student will prepare a term paper, based on literature research in a topic of current biochemical interest, and will discuss it in a seminar.

*Pre-requisite:* CHM 235EF and CHM 220E/JBC 220E

*Co-requisite:* CHM 340E recommended

*Instructors:* M. A. Winnik, J. C. Poë

**CHM 410 Topics in Chemistry, 2L**

A series of topics covering major areas of current interest in inorganic, organic and physical chemistry such as organometallic chemistry, organic synthesis, spectroscopy, kinetics, organic and inorganic reaction mechanisms, and the chemistry of biochemically important molecules.

*Pre-requisite:* CHM 220E, 330E, 340E and P.I.

*Instructor:* Staff

**CHM 415      Dissertation Based on Literature Research**

The dissertation will be based solely on literature research of a given area and would be expected to occupy one-fifth of a student's programme. The dissertation will be conducted under the guidance of a chemistry faculty member on a topic other than the student's research topic.

*Co-requisite:* CHM 410 (CHM 419 recommended)

*Instructor:* Staff

**CHM 419      Introduction to Research in Chemistry**

An experimental or theoretical research problem in chemistry under the supervision of a member of the chemistry staff. The total time involved would be of the order of 250 hours, and students, in addition to carrying out research on their own projects, would be encouraged to participate fully in the activities of their chosen research groups. A final report incorporating the aims and results of this research will be required.

*Co-requisite:* CHM 410 (CHM 415 recommended)

*Instructor:* Staff

## CLASSICS

Faculty Adviser: Professor T. G. Elliott

Classics is the study of the civilizations of Greece and Rome. Courses are offered in four general areas: 1) Graeco-Roman history, both political and cultural ("GRH" courses). Courses in this area require no knowledge of the original languages. 2) The masterpieces of ancient literature, read in translation ("GLL" courses). 3) Latin language and literature studied in the original ("LAT" courses). 4) Greek language and literature studied in the original ("GRK" courses).

Whether the student approaches Classics in the original languages or in translation, he will be introduced to intelligent people of another society faced with, and trying to meet, basic and universal issues. He will have a better sense of what these issues are, and of possible responses to them. His study of Classical civilizations will give him new questions to ask of his own society, and a broader feeling for possibilities in present and future.

**GRK 100      Introductory Greek, 3T**

A course designed to acquaint the student with the essentials of the Greek language and to introduce him to Greek literature.

*Instructor:* TBA

- GRK 120F Socrates on Trial, 3T**  
 A reading of Plato's *Apology of Socrates*. The course includes further study of the Greek language. (May not be combined with GRK 122F previously offered.)  
*Pre-requisite:* XIII Greek (or equivalent) or GRK 100.  
*Instructor:* TBA
- GRK 123S The Wanderings of Odysseus, 3T**  
 A reading of Homer's *Odyssey*, Books 6, 9, 11. The course includes further study of the Greek language. (May not be combined with GRK 120S previously offered.)  
*Pre-requisite:* XIII Greek (or equivalent) or GRK 100.  
*Instructor:* TBA
- GRH 101E The Classical Ideal and the Classical Experience, 3L**  
 This experimental course offers a survey of the classical background of western civilization. It will deal with the religious, tribal and philosophical bases of classical politics; the classical state and its citizen; the social context of Greek and Latin literature; the crisis of the ancient civilization; Christianity and classical culture.  
*Instructor:* T. G. Elliott
- GRH 300 The Roman Empire, 2L,1T**  
 The political, social and economic history of the empire from Augustus to St. Augustine. (P.I. necessary for first year students.)  
*Instructor:* T. G. Elliott
- GRH 312 The Golden Age of Greece, 2L,1T**  
 (I) Aspects of public and private life in the city-states of Greece during the 5th century B.C. will be studied through the literature of the time, supplemented by archaeological evidence.  
*Instructor:* C. I. Reid
- GRH 415 The Writing of History in the Ancient World, 2L,1T**  
 (I) A study of the foremost ancient historians: their assumptions, purposes, and methods. The course will involve readings from a selection of historical works in translation, including those of Herodotus, Thucydides, Livy, and Tacitus.  
*Instructors:* C. I. Reid and T. G. Elliott
- GLL 190 Greek and Roman Religion and Mythology, 2L,1T**  
 A survey of the myths of Greece and Rome and their implications, with readings in the original literature (in translation).  
*Instructors:* C. I. Reid and R. L. Beck

- GLL 200 **Greek Drama in Translation, 2L,1T**  
 (1) A study of selected tragedies and comedies of the great playwrights of Ancient Greece: Aeschylus, Sophocles, Euripides, Aristophanes, Menander.  
*Instructor:* R. L. Beck
- GLL 376 **English Literature and the Classical Tradition, 3L**  
 (Same as ENG 376)  
 A comparative study of the Classical background and influence on selected forms in English Literature: epic, drama, satire and the novel, lyric and pastoral.  
*Pre-requisite:* Any previous English course.  
*Instructors:* R. L. Beck and B. Corman
- LAT 100 **Introductory Latin, 3T**  
 A course designed to acquaint the student with the essentials of the Latin language and to introduce him to Roman literature.  
*Instructor:* TBA
- LAT 120S **The Poetry of Catullus, 3T**  
 Selections from the works of Catullus, including both his love poems and his satiric epigrams. Includes further study of the Latin language.  
*Pre-requisite:* XIII Latin (or equivalent) or LAT 100  
*Instructor:* C. I. Reid
- LAT 123F **Cicero in Court, 3T**  
 A reading of Cicero's *Pro Caelio*, a speech dealing with a famous scandal in the social circle of Catullus's mistress, Clodia. The course includes further study of the Latin language.  
*Pre-requisite:* XIII Latin (or equivalent) or LAT 100  
*Instructor:* C. I. Reid
- LAT 219F **Roman Comedy, 3T**  
 A study of Roman comedy, based on the reading of a play by Plautus and a play of Terence.  
*Pre-requisite:* Any 100-series Latin course  
*Instructor:* TBA
- LAT 224ES **Petronius, 3T**  
 Readings from the *Satyricon* of Petronius, a satirical novel of life in the Roman empire.  
*Pre-requisite:* Any 100-series Latin course  
*Instructor:* TBA

## COMMERCE

Faculty Adviser: Professor M. J. Hare

The Commerce courses now offered enable the student to acquire an appreciation of the uses and methods of collecting accounting data in a business organization. These courses qualify for credits in the programme in chartered accountancy offered by the Ontario Institute of Chartered Accountants. Students who wish to specialize in Commerce courses are advised to enrol in the Commerce and Finance Programme which is only offered on the St. George Campus.

**COM 100      Financial Accounting, 2L,1T**

Emphasis is placed on the principles and concepts which underlie the preparation of financial statements. Problems of income measurement are also stressed.

*Instructor: TBA*

**COM 221F    Management Accounting, 2L,1T**

The course introduces management control through case discussions and a computerized management game and examines the relationship between cost, volume and profit; the elements of cost; overhead allocation; job order costs; process costs (including the problems raised by joint products and by-products); budgeting; predetermined costs (estimated and standard costs); and the theories of absorption and direct costing.

*Pre-requisite: COM 100*

*Instructor: TBA*

**COM 222s    Information Systems and Control, 2L, 1T**

The course includes information system theory, control theory and practice, relevant costs, responsibility accounting, and a survey of selected management science techniques (with an introduction to linear programming, regression analysis, and capital budgeting). Through case discussions, the inter-relationships between information and control systems, managerial style and human behaviour are established.

*Pre-requisite: COM 221F*

*Instructor: TBA*

## EARTH AND PLANETARY SCIENCES

Faculty Adviser: Professor H. C. Halls

In the past few years worsening pollution, trips to the moon, disasters such as earthquakes and hurricanes and the realization that continents are indeed drifting about, has aroused a great interest in our environment. To understand it a

knowledge of the physical properties and behavior of the earth is fundamental. To help meet this need Erindale is introducing new courses in geology and geophysics, of a general nature in the early years, but later leading to specialization in study of the environment, to prospecting for ores and minerals and to remote sensing of the earth's surface from satellites and airplanes. Other senior courses may be taken on the St. George campus. Because new discoveries are expanding the dimensions and blurring the distinctions between geology and geophysics all courses are called Earth and Planetary Sciences.

**EPS 100E Elementary Geonomy, 1L,1T,2P**

(Formerly GLG 100E)

An introduction to the properties and behaviour of the earth including sea-floor spreading, continental drift, and an outline of world geology and regional geophysics, the physical basis of an environment.

*Instructors:* H. C. Halls and J. T. Wilson

**EPS 210E Introduction to Planetary Materials, 1L,1T,2P**

(I)

An introduction to the materials of the solar system emphasizing the physical and chemical principles and the tools of mineralogy, petrology and ore geology.

*Pre-requisites:* XIII CHM, EPS 100E

*Co-requisites:* EPS 100E if not taken previously

*Instructor:* A. E. Oldershaw

**EPS 220E Evolution and Geochronology, 1L,1T,2P**

An introduction to nucleosynthesis, the age of the earth, the origin of life and a survey of isotope geochronology and evolution.

*Pre-requisites:* XIII CHM and EPS 100E

*Instructors:* D. Collins and R. M. Farquhar

**EPS 230EF Behaviour and Structure of Rocks and Soils, 1L,1T,2P**

(Formerly GLG 230E)

An introduction to the mechanical properties of crustal materials and their reaction to changing physical conditions; for example, during construction, earthquakes and mountain building.

*Pre-requisite:* EPS 100E

*Co-requisite:* EPS 210E

*Instructor:* TBA

**EPS 310EF The Ocean Basins, 1L,1T,2P**

Morphology, structure and evolution of the ocean basins in the light of recent oceanographic discoveries.

*Pre-requisites:* EPS 100E or GLG 100E

*Co-requisite:* EPS 210E (GLG 210E)

*Instructor:* TBA

- EPS 320ES Exploration and Field Techniques, 1L,1T,2P**  
 The basic principles and field procedures of geophysical and geochemical prospecting; techniques and their applications and limitations with respect to mineral exploration.  
*Pre-requisites:* Physics 110 or equivalent and EPS 310EF  
*Co-requisite:* EPS 210E (GLG 210E)  
*Instructor:* H. C. Halls
- EPS 330ES Paleoenvironments, 1L, 1T, 2P**  
 The determination of ancient environments; their distribution in time and space, and their significance in relation to the evolution of the lithosphere and biosphere.  
*Pre-requisites:* EPS 100E  
*Co-requisites:* EPS 220E (EPS 210E, although not essential, would be an advantage)  
*Instructor:* A. E. Oldershaw

## ECONOMICS

Faculty Adviser: Professor M. J. Hare

Economics is a social science; that is, it is an exploration of the behavior of people in society and has a strong influence on the structure, well-being and development of a society.

The study of economics does not teach one to run a business, balance a family budget or make money on the stock market. More significantly it deals with the functioning of the economic system. Every nation, whatever its political orientation (totalitarian, socialist or capitalist) and whether it is technologically advanced or not has to contend with these economic decisions.

In recent years economic research has been particularly concerned with the diagnosis of two inversely related phenomena; excessive unemployment and inflationary price increases. Stress has also been given to the underlying sources of economic growth in both the industrial nations and the low-income countries.

In Canada, the problems of differential rates of regional development, the degree and impact of foreign ownership in Canadian industry and an equitable distribution of the tax burden are contemporary economic issues of significance.

The course sequence in Economics at Erindale is designed to accommodate the interests of both specialists and generalists. The specialist is encouraged to take both calculus and statistics in his early years. The generalist has the opportunity of taking a minimum of economic theory before he is permitted to enrol in courses which discuss economic policy.

There is a broad interchange and overlap between the study of Economics and many other disciplines in the social sciences. Therefore students can create

sequences between Economics and Geography, History, Political Science, Sociology and Mathematics. Those who have specialized in Economics very often pursue graduate work in either Economics or Business. It also provides solid training in such fields as Law or for entry into industry, the government or teaching.

**ECO 100 Introduction to Economics, 3L,1T**

A survey course with emphasis on the basic concepts in macro and micro economic theory; international trade and the techniques economists use to analyse problems. The concepts introduced will include: national income and its determination; monetary and fiscal techniques; business cycle determination; the derivation and use of supply and demand schedules; the theory of the firm and principles of comparative advantage and tariff protection.

*Instructor: TBA*

**ECO 101E Modern European Economic History, 2L,1T**

A study of the patterns of economic transformation in Europe, with emphasis on the antecedents and consequences of the Industrial Revolution.

*Instructor: TBA*

**ECO 200 Micro-Economic Theory, 2L**

An intermediate treatment of the basic tools of economic analysis with applications to a wide variety of economic problems in the area of pricing, resource allocation, income distribution and welfare economics. May not be combined with ECO 228E.

*Pre-requisite: ECO 100*

*Instructor: J. E. Floyd*

**ECO 202E Macro-Economic Theory, 2L,1T**

A detailed discussion of the theory of output, employment and the price level; of the techniques available for achieving economic stability; of central banking and Canadian financial institutions and markets, and of foreign-exchange markets. May not be combined with ECO 228E.

*Pre-requisite: ECO 100*

*Instructor: H. Flakierski*

**ECO 221E North American Economic History and Development, 2L,1T**

An examination of the evolving patterns of economic development in North America. Comparative study of the growth experience of the major sectors will be undertaken with the objective of explaining leads and lags in these sectors.

*Pre-requisite: ECO 100*

*Instructor: G. F. McGuigan*

- ECO 225E Intermediate Economic Theory, 2L,1T** (Not offered in 1971-72)  
 A continuation of macro and micro economic theory designed to develop a sufficient theoretical basis for more specialized courses in applied theory and policy. The first term introduces further discussion and a critical assessment of the elements of Keynesian economics. The second term analyzes the theory of imperfect competition and includes a critique of the traditional theory of the firm. May not be combined with ECO 200 or ECO 202E.  
*Pre-requisite:* ECO 100  
*Instructor:* TBA
- ECO 228E Contemporary Economic Problems and Policy, 2L**  
 This course focuses on the application of theoretical concepts, many of which were introduced in Economics 100, to issues such as the economics of inflation; federalism; rehabilitation and job-training; poverty and discrimination; international monetary reform; and underdeveloped countries and foreign aid. May not be combined with ECO 200, 202E, 324, 328, 336 and 347E.  
*Pre-requisite:* ECO 100  
*Instructor:* Staff
- ECO 230ES Quantitative Methods in Economics, 2L,1T**  
 This course supplements the statistical concepts already developed and applies these to problems in economics. May not be combined with STA 232.  
*Pre-requisites:* STA 202EF and ECO 100  
*Co-requisites:* ECO 200, ECO 202E  
*Instructor:* TBA
- ECO 324 Economic Development, 2L,1T**  
 Emphasis is on the economic conditions of low-income countries and the prospects for their economic transformation. Frequent reference will be made to specific issues affecting the nations of Africa, Asia and Latin America.  
*Pre-requisites:* ECO 200 and 202E  
*Instructor:* M. J. Hare
- ECO 328 International Economics and Policy, 3L**  
 An analysis of the nature, effects and policy implications of international trade and finance. The theories of comparative costs and reciprocal demand; factor reward equalization; balance of payments and foreign exchanges; international tariffs; liquidity; customs unions;

and relevant topics related to current problems in international economic affairs.

*Pre-requisites:* ECO 200 and 202E

*Instructor:* F. B. Mayer

**ECO 336 Public Finance, 3L**

The construction of an economic theory of government to explain the determination of the budget and to provide an economic rationale for government intervention; an analysis of changing patterns of expenditure and revenue of federal and provincial government; the development of criteria for the evaluation of expenditure programmes and the tax structure; the problems and techniques of fiscal stabilization.

*Pre-requisite:* ECO 200

*Instructor:* G. B. France

**ECO 346E Senior Seminar in Economics, 2L**

A research seminar. Students undertake one or more substantial research papers under close supervision.

*Pre-requisites:* ECO 200 and 202E and P.I.

*Instructor:* Staff

**ECO 347E Economic Growth and Planning in a Socialist Economy, 2L, 1T**

The problems of economic growth and resource allocation in a socialist economy. Emphasis is placed on such subjects as Kalecki's growth model; balanced growth and the problem of effective demand; evaluation of efficiency of investment, and economic planning in a socialist economy.

*Pre-requisites:* ECO 200 and 202E

*Instructor:* H. Flakierski

**ECO 350 Applied Economic Theory I, 2L, 1T**

May not be combined with ECO 228E.

*Pre-requisites:* ECO 200 and 202E

*Instructor:* TBA

**ECO 351 Applied Economic Theory II, 2L, 1T**

May not be combined with ECO 228E.

*Pre-requisites:* ECO 200, ECO 202E

*Instructor:* TBA

**ECO 360E Economic Transformation and Technological Change, 2L, 1T**

(Not offered in 1971-72)

An analysis of secular growth patterns in the industrial countries with emphasis on technological change and productivity increases. May not be combined with ECO 228E.

*Pre-requisites:* ECO 200 and 202E

*Instructor:* M. J. Hare

## ENGLISH

Faculty Adviser: Professor R. Van Fossen

The study of English attempts to engage the mind, imagination and sensibility of the student in the literature of the English-speaking world, and in related literatures, both classical and modern. The sequence of English literature, from its beginnings (about the seventh century) to the present, constitutes a continuous tradition that reflects the vitality of an entire civilization—its political, social, religious, scientific, and cultural life—and, in addition, presents a permanent record of the ways in which the human mind and imagination have responded to recurrent problems and situations. At the same time, each age gives rise to its own peculiar problems. The literature of the past and the literature of our own day can cast light upon the present and indeed upon the future. Literary studies can provide us with a fuller knowledge of ourselves and our world and with deeper insight into the nature of human experience.

More particularly, the undergraduate study of English in this University prepares the student for more advanced work in the discipline, appropriate standing in the English Language and Literature Programme qualifying the student, unconditionally, for graduate study in accredited universities of this country, of the United States and of the United Kingdom. In addition, it prepares its students for a Type A certificate programme for secondary-school teachers, particulars of which can be obtained from The College of Education, for work in journalism and in the publishing field, and for positions in business and in various departments of government.

### ENG 108     **Forms of 20th Century Literature, 3L**

At least twelve and no more than fifteen works by twentieth century authors, including works by at least three novelists, three poets and three dramatists. These shall include works by at least six of the following authors: Conrad, Faulkner, Joyce, Lawrence, Woolf; Auden, Eliot, Frost, Stevens, Yeats; Albee, Beckett, O'Neill, Pinter, Shaw.

*Instructor:* Staff

### ENG 112     **Major British Writers, 3L**

Selections from: Chaucer, Spenser, Shakespeare's non-dramatic poetry, Donne, Milton, Pope, Johnson, Wordsworth or Keats, Browning or Tennyson, Yeats or T. S. Eliot. Text: *The Norton Anthology of English Literature*, one volume ed. (Revised).

Alternative or additional texts may be assigned by the instructor. At least three plays, including one by Shakespeare; Swift, *Gulliver's Travels*; one novel, novella, or group of short stories by each of: Fielding, Dickens or George Eliot, and Joyce or James. Additional works may be selected.

*Instructor:* Staff

- ENG 152      **Canadian Literature in English, 3L**  
 Selections from *The Book of Canadian Prose* (ed. Smith); Moodie, *Roughing it in the Bush*; Leacock, *Sunshine Sketches*; MacLennan, a novel; Callaghan, *More Joy in Heaven*. Four to six additional novels. Selected Poetry and short fiction. Recommended reading: *Canadian Anthology* (ed. Klinck and Watters, 2nd ed.); supplementary texts may be selected.  
*Instructor:* Staff
- ENG 165      **English Literature: Forms and Approaches, 3L**  
 Emily Bronte, *Wuthering Heights*; Faulkner, *The Sound and the Fury*; Shakespeare, *Hamlet*; Congreve, *The Way of the World*; Selections from the poetry of Marvell; selections from the poetry of Hopkins; More, *Utopia* or Brown, *Religio Medici*, or Carlyle, *Sartor Resartus*. At least four more works chosen so as to extend the range of forms, to make possible additional approaches, and to illuminate by comparison the listed texts.  
*Instructor:* Staff
- ENG 200      **Old English Language and Literature, 3L** (Not offered in 1971-72)  
 (I) A study of the language, literature, and culture of the Old English period as represented principally in the surviving poetry. The first half of the course will focus on developing fluency in the reading of Old English, concentrating on the grammar, syntax, and style of various pieces of prose and poetry. The second half of the course will be given to the intensive study of further major texts in Old English literature. Text: J. C. Pope, *Seven Old English Poems*. Other texts to be selected. Fulfills specialization requirement.  
*Instructor:* Staff
- ENG 212      **Shakespeare, 3L**  
 (I) Special study of *Romeo and Juliet*, *A Midsummer Night's Dream*, *Richard II*, *Henry IV*, Parts I and II, *Twelfth Night*, *Measure for Measure*, *Hamlet*, *Antony and Cleopatra*, *The Tempest*. Additions or substitutions may be made by the instructor. Duplication with English 332 will be avoided. Fulfills specialization requirement.  
*Instructor:* Staff
- ENG 218      **Major American Authors, 3L**  
 (I) An introductory study of a number of American authors—no fewer than four and no more than six—chosen from different periods and so as to suggest something of the range of American literature. At least three of the authors should be drawn from the following list: Hawthorne, Melville, Whitman, Mark Twain, James, Stevens, Eliot,

Faulkner. May not be combined with ENG 101. Fulfills specialization requirement.

*Instructor:* Staff

ENG 220 **Varieties of Prose Fiction, 3L**

(I) Reading lists available from the Bookstore. May not be combined with ENG 206.

*Instructor:* Staff

ENG 230 **Varieties of Drama, 3L**

(I) Approximately twenty plays to be chosen from the different historical periods and genres. Reading lists available from the Bookstore. May not be combined with ENG 205.

*Instructor:* Staff

ENG 240 **English Poetry, 3L**

(I) A study of various forms, themes, styles and traditions. May not be combined with ENG 202.

*Instructor:* Staff

ENG 302 **English Poetry and Prose, 1500-1600, 3L**

Poetry: Selections from the poetry of Wyatt and Surrey, Sidney, Marlowe, Shakespeare, Spenser (including *The Faerie Queene*, Book I, at least two other books, and the *Mutabilitie Cantos*) and Donne. Other poets may be added. Prose: More, *Utopia*; Sidney, *Defence of Poesy*. Selections from at least two of the following writers: Elyot, Ascham, Hakluyt, Hooker, Lyly, Sidney, (*Arcadia*), Nashe and Deloney. Additional reading from the following: Erasmus, *Praise of Folly*; Castiglione, *The Courtier*; Machiavelli, *The Prince*; Ariosto, *Orlando Furioso*.

Fulfills specialization requirement

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 304 **English Poetry and Prose, 1600-1660, 3L** (Not offered in 1971-72)

Selected poetry of Donne, Jonson and their successors; Milton. Prose by such writers as Bacon, Browne, Burton, Milton, Traherne. Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 306 **English Poetry, Prose and Drama, 1660-1800, 3L**

Selections from the works of at least ten of the following: Addison, Boswell, Burke, Burns, Butler, Collins, Congreve, Cowper, Defoe, Dryden, Gay, Gibbon, Goldsmith, Gray, Halifax, Johnson, Pepys,

Pope, Prior, Rochester, Sheridan, Smart, Steele, Swift, Thomson, Horace Walpole, Wycherley, Young.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 308

**Romantic Poetry and Prose, 3L**

Blake, Wordsworth, Coleridge, Byron, Shelley, Keats for special study; brief selections from other poets of the period such as Crabbe, Scott, Landor, Clare, Wordsworth, *Preface to Lyrical Ballads*, *Preface to the Edition of 1816*; Coleridge, *Biographia Literaria*; Shelley, *Defence of Poetry*; Keats, Selected letters; selected writings of Lamb and Hazlitt.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 312

**Chaucer, 3L**

*Troilus and Criseyde*; selections from the *Canterbury Tales*; further selections from Chaucer's work.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 322

**Fiction Before 1832, 3L**

At least twelve works, including one or more by each of Richardson, Fielding, Sterne, Jane Austen and Scott.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 324

**Fiction, 1832-1900, 3L**

At least twelve works, including one or more by each of Dickens, Thackeray, Trollope, Emily Brontë, George Eliot and Hardy.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 328

**Modern Novel, 3L**

At least fifteen works chosen from the period c. 1900-c. 1945 including one or more by each of the following: James, Conrad, Joyce, Lawrence, Faulkner.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

- ENG 332 English Drama to 1642, 3L**  
*Secunda Pastorum* and at least two other miracle plays from *Everyman and Mediaeval Miracle Plays* (Everyman Library); *Everyman*; Medwall, *Fulgens and Lucres* or Heywood, *The Four P. P.*; Gammer Gurton's *Needle* or Udall, *Ralph Roister Doister*; Norton and Sackville's *Gorboduc*; Lyly, *Endymion*; Peele, *The Old Wives Tale*; Marlowe, *Tamburlaine*, Part I, *Doctor Faustus*, *Edward II*; Kyd, *The Spanish Tragedy*; Shakespeare, at least seven of the following: *Love's Labour's Lost*, *Richard III*, *Much Ado about Nothing*, *As You Like It*, *Troilus and Cressida*, *Othello*, *Macbeth*, *King Lear*, *Coriolanus*, *The Winter's Tale*; Jonson, two of the following: *Everyman in his Humour*, *Sejanus*, *Volpone*, *The Alchemist*, *Bartholomew's Fair*; at least six of the following: Dekker, *The Shoemaker's Holiday*; Marston and Webster, *The Malcontent*; Chapman, Johnson and Marston, *Eastward Ho!*; Beaumont and Fletcher, *Philaster, or a King and No King*; Webster, *The Duchess of Malfi*; Tourneur, *The Revenger's Tragedy*; Middleton and Rowley, *The Changeling*; Middleton, *A Game of Chesse*; Massinger, *A New Way to Pay old Debts*; Ford, *The Broken Heart*.  
 Fulfills specialization requirement.  
*Pre-requisite*: one previous course in English.  
*Instructor*: Staff
- ENG 334F Restoration and 18th Century Drama, 3L**  
 Reading lists available from the Bookstore.  
*Pre-requisite*: one previous course in English.  
*Instructor*: Staff
- ENG 338 Modern Drama, 3L**  
 A minimum of twenty representative modern plays including one or more by at least five of the following: Ibsen, Chekhov, Shaw, Synge, Yeats, O'Casey, O'Neill, Eliot, Beckett, Pinter.  
 Fulfills specialization requirement.  
*Pre-requisite*: one previous course in English.  
*Instructor*: Staff
- ENG 348 Modern Poetry, 3L**  
 Hopkins, Yeats, Pound, Eliot, Stevens and other poets.  
 Fulfills specialization requirement.  
*Pre-requisite*: one previous course in English.  
*Instructor*: Staff
- ENG 350 American Literature 1607-1865, 3L** (Not offered in 1971-72)  
 Selections from at least two pre-Nineteenth century authors and Cooper, Emerson, Poe, Thoreau, Hawthorne, Melville, Whitman,

Dickinson. Other authors may be added.

Fulfills specialization requirement.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 356

**Canadian Fiction, 3L**

Selections from an anthology of short stories. A minimum of twenty works including at least one work by eight of the following authors: Haliburton, John Richardson, Sara Jeannette Duncan, Leacock, Grove, Callaghan, MacLennan, Lowry, Laurence, Susannah Moody, Richler. French Canadian fiction in translation may be included.

*Pre-requisite:* one previous course in English.

*Instructor:* Staff

ENG 372E

**Special Studies: Literature and Social Criticism: The Problem of Individualism, 3L**

This course will study how literary and non-literary forms of social criticism overlap, how they differ, and how literature functions in its own way as a form of social criticism. The following authors will be read: Dickens, selected novels; Faulkner, selected novels; Freud, selected papers; D. H. Lawrence, selected novels and poems; H. Marcuse, *One-Dimensional Man*; Marx, selections from *Economic and Philosophic Manuscripts of 1844*; C. B. Macpherson, *The Political Theory of Possessive Individualism*; Max Weber, *The Protestant Ethic and the Spirit of Capitalism*; Jean-Paul Sartre, selected novels, *St. Genet*, selections from *Being and Nothingness*. May not be combined with ENG 376E.

*Pre-requisite:* one previous English course and/or permission of instructor.

*Instructor:* T. H. Adamowski

ENG 376E

**Special Studies: English Literature and the Classical Tradition, 3L**  
(Same as GLL 376E)

English literature and the classical tradition. A comparative study of the classical background and influence on selected forms of English Literature; epic drama, satire and the novel, lyric and pastoral.

*Pre-requisite:* one previous course in English.

*Instructors:* B. Corman and R. Beck

ENG 417

**Four Major 19th Century Authors, 3L**

Fulfills specialization requirement.

*Pre-requisite:* normally at least three previous courses in English, with B-standing or better in each of at least three.

*Instructor:* Staff

## FRENCH

Faculty Adviser: Professor A. L. Stein

Erindale College offers a dynamic contemporary French programme designed to anticipate the needs of Canadian students. Canada's current consciousness of its bicultural heritage and willingness to explore avenues leading to bilingualism have greatly influenced our pedagogical aims and methods.

For students wishing to pursue a programme of study built on previous language training and leading to a high level of competence in French, we offer courses designed to achieve this aim. Our methods are based on the use of the most modern laboratory equipment coupled with student-faculty participation in conversational practice. In second and third years courses embracing the study of French as a language system are offered through theoretical and applied linguistics.

The study of French literature has traditionally been closely related to the development of language skills. In our programme the student who is competent in the language is offered a wide range of literature courses. In these the student will become aware of the various critical approaches; historical, textual, esthetic, and will acquire an appreciation and understanding of French thought, art and culture. The skills thus developed will also be used to study French-Canadian literature and culture.

There is great flexibility built into the programme, with few pre-requisites or co-requisites for most courses. In special cases pre-requisites will be waived if a student can satisfy the instructor that he is able to undertake the programme.

- |         |   |
|---------|---|
| FRE 120 | <p><b>Introduction to University French Studies, 3T, 2P</b></p> <p>The major part of this course, designed to facilitate the acquisition of the linguistic skills necessary for active participation in courses offered is devoted to language practice. However, as well as class and laboratory work in language, attention may also be given to readings and discussions of literary works.</p> <p><i>Pre-requisite:</i> Gr. XIII French</p> <p><i>Instructor:</i> Staff</p>   |
| FRE 140 | <p><b>Studies in Modern French Literature, 1L, 1T</b></p> <p>Based on a detailed study of specific works selected from the novel, drama and poetry of the 19th and 20th centuries this course is intended as a practical introduction to the techniques of literary criticism and analysis. Four novels, two plays and four collections of poetry will be selected from the works of Constant, Balzac, Stendhal, Hugo, Musset, Baudelaire, Verlaine, Mallarme, Alain-Fournier, Apollinaire, Mauriac, Sartre, Camus, Eluard, Char, Anouilh, Ionesco,</p> |

Butor, etc. May not be taken concurrently with any course other than 120 or 142.

*Pre-requisite:* Gr. XIII French/P.I.

*Co-requisite:* FRE 120

*Instructor:* TBA

FRE 142

**Man and Society in French Fiction, 1L,1T**

Studies in 20th century French and French-Canadian fiction with special emphasis on the theme of man in society. Attention will also be given to techniques of literary criticism and analysis. Texts will be selected from the works of Gide, Saint-Exupéry, Malraux, Sartre, Camus, Savard, Roy, Langeven, Thériault, Ferron, etc.

*Pre-requisite:* Gr. XIII French/P.I.

*Co-requisite:* FRE 120

*Instructor:* TBA

FRE 271

**Language Practice, 3T,1P**

(I)

A continuation of FRE 120, this course is designed to further the student's competence in both written and oral French. The programme will include grammar, composition, debate, pattern drills and language laboratory work. Required for the specialist, strongly recommended for the non-specialist.

*Pre-requisite:* FRE 120/Permission of Professor A. Stein.

*Instructor:* Staff

FRE 290

**Independent Study I, 1T**

(I)

Individual study with a member of staff on a topic of common interest including readings, discussions, papers. Students may if they wish arrange to study two topics, each of which will be considered as constituting one half of the course.

*Pre-requisite:* FRE 120 and P.I.

*Instructor:* TBA

FRE 320

**The Literature of Classicism, 1L, 1T**

(I)

A study of the major writers of the 17th century with emphasis upon aesthetic and moral characteristics which constitute "classicism".

*Pre-requisite:* FRE 120/P.I.

*Instructor:* TBA

FRE 322

**Literature of the Enlightenment, 1L,1T**

(I)

A study of the revolution in social, political, religious and intellectual values which characterized the literature of the 18th century. Its principal authors—Montesquieu, Voltaire, Diderot, Rousseau—raised

issues which neither the Revolution nor the 20th century has satisfactorily resolved.

*Pre-requisite:* FRE 120/P.I.

*Instructor:* A. Stein

- FRE 328     **Symbolism and Surrealism, 1L,1T**  
 (I)     Specific texts will be studied, with emphasis on the main period of the movement.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* C. Cloutier-Wojciechowska
- FRE 330     **The Literature of French Canada, 1L,1T**  
 (I)     A study of selected novels, drama and poetry. The texts will be studied from the historical, sociological and aesthetic points of view.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* C. Cloutier-Wojciechowska
- FRE 342     **French Poetry, 1L,1T (Not offered in 1971-72)**  
 (I)     An introductory study 1500-1950.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* TBA
- FRE 352     **Drama from 1600-1800, 1L,1T (Not offered in 1971-72)**  
 (I)     Specific plays from the period dealing with aspects of comedy, tragedy and social drama.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* TBA
- FRE 354     **Drama from 1800-1950, 1L,1T**  
 (I)     Continuation of FRE 352 with emphasis changing from classical theatre to the evolution leading to modern theatre.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* D. Trott
- FRE 364     **Prose Fiction from 1800-1950, 1L,1T (Not offered in 1971-72)**  
 (I)     A study, through the close analysis of specific texts, of the ways in which such major writers as Balzac, Stendhal, Flaubert, Maupassant and Zola developed the techniques of the novel while exploring such varied themes as ambition, alienation and class struggle.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* TBA
- FRE 371     **Language Practice, 3T,1P**  
 (I)     A continuation of FRE 271, designed to advance the student's competence in written and spoken French.  
*Pre-requisite:* FRE 271/P.I.  
*Instructor:* TBA

- FRE 372      The Structure of Modern French, 1L,1T (Not offered in 1971-72)**  
 (I)      An introduction to French linguistics: the study of phonological, morphological and syntactical systems of contemporary French. Strongly recommended for students preparing for a teaching career in French language. (Not open to students who have taken FRE 275/355).  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* TBA
- FRE 374      Introduction to the Stylistics of French, 1L,1T**  
 (I)      The study of stylistic aspects of contemporary spoken and written French. Strongly recommended to students preparing for a teaching career in French language or literature.  
*Pre-requisite:* FRE 120/P.I.  
*Instructor:* TBA
- FRE 390      Independent Study II**  
 Individual work with a member of staff on a literary or linguistic topic of common interest, including readings, discussions, papers. Students may if they wish arrange to study two topics, each of which will be considered as constituting one half of the course.  
*Pre-requisite:* Any French course over 200-series and P.I.  
*Instructor:* TBA
- FRE 428      Contemporary French Literature, 1L,1T**  
 The study of the novel and theatre since circa 1950 with special reference to "le nouveau roman" and "l'anti-théâtre". (A minimum number of students is required for this course.)  
*Pre-requisite:* Any French course over 200-series/P.I.  
*Instructor:* TBA

## GEOGRAPHY

Faculty Advisers: Professor D. F. Putnam, Professor H. F. Andrews

Geography deals with the surface of the earth and with man's place on it. Throughout time, man's active curiosity about his environment has led him to explore the whole of the earth's surface and to locate and describe its various features and phenomena. Implicit in this curiosity is a desire to make use of the environment and to recognize and exploit its resources. Such knowledge, recognition, and use of environmental resources is basic to man's existence and governs the patterns of distribution of human populations and activities. Perhaps it is not too restrictive to say that the basic objective of Geography is to describe and explain the reciprocal relations of man and the environment, the results of which are given visible expression in the form and composition of the landscape.

Geography approaches its task in various ways. In common with the natural and social sciences it attempts to systematize or classify its data. It is interested in the nature of sequential changes in the landscape, but above all, it is interested in the spatial distributions, associations and interactions of terrestrial phenomena. It is recognized that many students may come to Erindale with little knowledge of geography, while others will enter with a lively curiosity already sharpened and focused by an excellent high school experience.

Geography is offered at Erindale primarily as an interesting and important contribution to general education, and as a discipline worthy of study on its own merits. Geography may also be an approach to a worthwhile career.

Geography programmes are well established in Ontario Secondary Schools and there is a continuing demand for qualified teachers. Geographers also continue to find employment in many branches of Federal and Provincial Government service. Geographical training has proven useful in the fields of urban, regional and resource planning.

Students who may intend to specialize in Geography later are advised to elect at least two courses in Geography each semester. Members of the staff in Geography will be glad to advise students with respect to specialization in the discipline and about the courses which are most appropriate to their specific interests. Intending specialists in the four year degree programme will be required to obtain standing in at least nine GGR courses, including the following: GGR 203E, 205E, 211E or 231E, 491E.

The following courses in geography may be included in a B.Sc. programme:  
GGR 205E, 211E, 301EF, 311E, 315E, 318ES, 323ES, 331E, 481E, 491E.

**GGR 111E    Introduction to Man's Natural Environment, 2L,2P**

Variations in global climates, land-sea relationships, and vegetation patterns through time. The significance of man as an agent of environmental change will be considered.

*Instructor:* W. Harrison and Staff

**GGR 131E    Introduction to Man's Use of the Environment, 2L,2P**

Variations in economic and social organizations at pre-industrial and advanced levels of technology. Emphasizes the development of knowledge and techniques of resource utilization.

*Instructor:* T. F. McIlwraith and Staff

**GGR 203E    Concepts, Methods and Values in Spatial Analysis, 2L,2P**

An introduction to the variety of methods used in geographic enquiry; descriptive and inferential statistics, organizing concepts in geographical analysis and value systems guiding methods of study. (May not be combined with GGR 201EF or GGR 202ES, which is the same course in the 1970-71 Calendar).

*Pre-requisites:* At least one GGR course/P.I.

*Instructor:* H. F. Andrews and Staff

- GGR 205E **Remote Sensing and Representation of Environment, 2L,2P**  
 Principles and tools used in environmental sensing systems.  
 Cartographic representation of data.  
*Pre-requisites:* At least one GGR course/P.I.  
*Instructor:* TBA
- GGR 211E **Process-Response Models for the Physical Environment, 2L,2P**  
 Selected interaction in the land-sea-air system, examples taken from  
 geomorphology, hydrology, climatology, pedology and biogeography.  
*Pre-requisites:* GGR 111E/P.I.  
*Instructor:* W. Harrison and Staff
- GGR 231E **Process-Response Models for the Socio-Economic Environment, 2L,2P**  
 Studies of the location and distribution of man's activities in space:  
 models of human response to the natural and social environment in  
 structuring patterns of agricultural, manufacturing, service, trade  
 transportation and urban systems.  
*Pre-requisites:* GGR 131E/P.I.  
*Instructor:* H. F. Andrews and Staff
- GGR 241E **An Introduction to Urban Geography, 2L,2P**  
 The distribution of cities and the internal differentiation of cities as  
 spatial systems: analysis of the structure and functioning of such  
 systems and the processes involved in their evolution and change.  
 (May not be combined with GGR 203EF or 204ES from 1970-71  
 Calendar). *N.B.* This course will be available in the evening only for  
 1971-72.  
*Instructor:* H. F. Andrews
- GGR 301EF **Field Methods, 3P**  
 Direct out-of-doors investigation of physical and socio-economic  
 phenomena; field notes and samples taken during a week-long field  
 camp in September are analysed and reported upon. Cost  
 of the camp is about sixty dollars per student, which covers  
 transportation and accommodation.  
*Pre-requisites:* Two full courses in Geography  
*Instructor:* Staff
- GGR 302ES **Philosophy of Geography, 1L,1T**  
 An historical review of the major contributions to geographic thought.  
*Pre-requisites:* At least two full courses in Geography  
*Instructor:* Staff
- GGR 303EF **Multivariate Statistical Methods in Geography, 2L,2P** (Not offered  
 in 1971-72)

An introduction to problems and procedures of research designs in Geography requiring simultaneous consideration of many different variables, including treatment of discriminant analysis, factor analysis; principal components analysis, cluster analysis and multiple regression. *Pre-requisites:* GGR 203E. *N.B.* Previous University Math. course strongly recommended, but not required.

**GGR 304ES Regionalization Methods in Geography, 2L,2P** (Not offered in 1971-72)

Examination of the regional concept and regionalization as “spatial classification”, alternative methods of regional delimitation.

*Pre-requisite:* GGR 303EF

**GGR 311E Conservation Strategies, 2L,2P**

Examination of the effects of various approaches toward lessening the impact of technology on the natural environment. Favourable and unfavourable management schemes for control of such pollutants as noise, heat, heavy-metals, radioactivity, and so on, will be scrutinized.

*Pre-requisite:* GGR 211E

*Instructor:* Staff

**GGR 315E Resource Development Problems, 2L,2P**

A series of specific studies in the problem of resource utilization under various environmental conditions, with emphasis upon Canadian problems. (May not be combined with GGR 201ES from 1969-70 Calendar).

*Pre-requisite:* Any two GGR courses/P.I.

*Instructor:* D. F. Putnam

**GGR 318ES Man and Vegetation Change, 2L,2P**

A course in historical biogeography which will evaluate man’s role as an agent of vegetation change.

*Pre-requisites:* GGR 211E, a Botany course/P.I.

*Instructor:* A. R. Byrne

**GGR 323ES Pleistocene Environments, 2L,2P**

The causes and consequences of environmental changes of the Pleistocene epoch. The approach taken will be interdisciplinary, combining geology, geomorphology, biogeography and climatology.

*Pre-requisites:* GGR 211E/P.I.

*Instructor:* A. R. Byrne

**GGR 331E Agriculture, 2L,2P**

Background discussions of agricultural origins, agricultural ecology and the economic development of agricultural patterns. The concept of the agricultural region and distribution of agricultural types. (May not

be combined with GGR 307ES or 308ES from 1970-71 Calendar).

*Pre-requisites:* Two of GGR 111E, 131E, 211E, 231E/equivalent/P.I.

*Instructor:* D. F. Putnam

**GGR 333EF Transportation Geography, 2L,2T**

Principles of transport and land use; characteristics of transportation networks and movements; transportation and economic development, past and present; geographical aspects of contemporary transportation problems. (May not be combined with GGR 304ES from 1970-71 Calendar).

*Pre-requisites:* GGR 231E/P.I.

*Instructor:* T. F. McIlwraith

**GGR 334ES Industrial Location, 2L,2T (Not offered in 1971-72)**

Theory and patterns of the distribution of manufacturing activity.

*Pre-requisites:* GGR 231E/P.I.

**GGR 335EF Geography of Tertiary Activity, 1L,1T (Not offered in 1971-72)**

Employment in the tertiary sector (distribution, administration, communications, etc.) now exceeds employment in any other sector in North America. This course examines the growth, composition and changing spatial distribution of service activity in relation to changing factors of location and changes in urban structure.

*Pre-requisites:* GGR 231E/P.I.

**GGR 336ES Political Geography, 2L,1T**

The study of the geographical relations of political phenomena: nations, states and other political entities in their relations with one another and with a totality of earth-space.

*Pre-requisites:* Two GGR courses

*Instructor:* TBA

**GGR 341E Urban Systems Workshop, 1L,1T,2P**

Detailed enquiries of a limited range of topics in urban geography. Possible areas of study include: perception of the urban environment and image; modelling aspects of a system of cities; political processes in urban areas; contributions to an "Atlas of Toronto"; urban-rural fringe studies.

*Pre-requisites:* GGR 203E, Sociology 205/equivalent/P.I.

*Instructor:* H. F. Andrews

**GGR 351E Historical Geography of Northeastern North America, 2L,2T**

Social and economic development and change north of the Potomac River and east through the St. Lawrence-Great Lakes system to the edge of the plains, from the time of European contact; evaluation of

the land by successive generations of observers and users is of central interest in this course.

*Pre-requisites:* GGR 231E/P.I. (A Canadian or American History course would be desirable).

*Instructor:* T. F. McIlwraith

**GGR 361E Canada-Contemporary Regional Studies, 2L,2P**

A study of the spatial relations and distribution patterns of the physical features, resources, population, and economic development. (May not be combined with GGR 205EF or GGR 206ES from 1970-71 Calendar or 300EF from 1969-70 Calendar).

*Pre-requisite:* One of GGR 111E, 131E, 133E/equivalents.

*Instructor:* D. F. Putnam

**GGR 363E Regional Studies, 2L,1T**

Topics in the geography of a nation or part of the world to be specified.

*Pre-requisites:* GGR 231E/P.I.

*Instructor:* TBA

**GGR 481E Advanced Reading Seminars, 1T**

Topics to be determined by interest.

*Pre-requisite:* P.I.

*Instructor:* Staff

**GGR 491E B.A. Thesis, (2 course credits)**

A research project, each student working on a topic of his choice under the individual guidance of a member of the staff. Copies of the thesis are to be submitted by March 1, and the student will present it before an examining committee.

*Pre-requisites:* Six GGR courses

*Instructor:* Staff

## GERMAN

Faculty Adviser: Mr. W. Meyer-Erlach

Through the media of language and literature undergraduate courses in German offer the interested student access to an important part of Western Civilization.

Language study includes phonetics, oral expression, translation and essay writing. Advanced audio-visual aids maximize the variety of material and the ease of learning while still allowing for personal student-instructor contact. Great care is taken to involve the language student with important issues of a social, political, scientific and cultural nature. This ensures a total meaningful immersion in German culture and life for both the serious German scholar as well as others who require a reading knowledge only.

Ranking with the finest achievements of the human mind are the works of authors like Lessing, Goethe, Schiller, Holderlin, Novalis, Grillparzer, Heine, Keller, Hesse, Mann and Brecht. They form an illustrious gathering linking the literature of the German speaking countries to world literature.

The serious student is well advised to adopt the language sequence (GER 110, GER 210, GER 310) *and* the literature sequence (GER 120, GER 220 plus three courses from the 300 and 400 group). Such a programme will give him the choice of *specializing in German at any time* of his four year undergraduate career without forcing him to make an irreversible decision before he is ready.

Qualified students are encouraged to investigate the benefits of *Third Year Studies Abroad*. These benefits are cumulative since the student continues to be enrolled with the University of Toronto—Erindale College—and receives full credit for the year upon completion of special assignments while pursuing particular interests at a German university.

An even more attractive alternative for those who do not wish to spend a full year abroad is the *SUMMER PROGRAMME* (now in its tenth year) of the *CANADIAN-GERMAN ACADEMIC EXCHANGE ASSOCIATION*. The C.G.A.E.A. is a non-profit organization assisted by both the governments of Canada and the Federal Republic of Germany. Working and travelling for three months will greatly enhance the student's knowledge of the foreign culture and improve his ability to communicate while enabling him to earn at least part of his tuition for a continuation of his studies upon his return to Erindale College.

**GER 105      Basic German A, 2T,2P**

Elementary instruction for all students with little or no knowledge of the language who wish to improve their comprehension of written and spoken German.

*Instructor:* J. P. Payne

**GER 110      Language Practice I, 2T,2P**

Intensive guidance in learning to write and speak German. Materials used in the tutorials and practice sessions of this course will introduce the student to the cultural and socio-political background of the German speaking countries.

*Pre-requisite:* 3 years of German taken at a secondary school in the Province of Ontario/P.I.

*Instructor:* J. P. Payne

**GER 120      Modern Literature, 2L,1T**

Topical works in modern German Literature, with emphasis on the 20th Century, will be investigated under the theme: *The author as a seismograph of society*.

*Pre-requisite:* 3 years of German taken at a secondary school in the Province of Ontario/P.I.

*Instructor:* W. Meyer-Erlach

- GER 205      Basic German B, 2T,1P**  
 The continuation of GER 105 with consideration for the needs of individual students and their special interests. Also suitable for those who have taken German before and require a refresher course in this language.  
*Pre-requisite:* GER 105/P.I.  
*Instructor:* W. Meyer-Erlach
- GER 210      Language Practice II, 2T,1P**  
 The *intermediate* stage of a three-year sequence that begins with GER 110.  
 An intensive course for those who are interested in gaining an active command of the language with the aid of relevant sources of information.  
*Pre-requisite:* GER 100/P.I.  
*Instructor:* J. P. Payne
- GER 220      Enlightenment and "Storm and Stress", 2L,1T**  
 The encounter of a static and a dynamic period in 18th Century German Literature. A study of the works of the German *Aufklärung* and *Sturm und Drang* culminating in Goethe's *Faust* (Part One).  
*Pre-requisite:* GER 120/P.I.  
*Co-requisite:* GER 120, if taken in *First Year* with P.I.  
*Instructor:* W. Meyer-Erlach
- GER 310      Language Practice III, 2T,1P**  
 The *advanced* course in a three-year sequence especially designed for students aiming at a thorough knowledge of stylistics and for fluency of expression in a realistic setting.  
*Pre-requisite:* GER 210/P.I.  
*Instructor:* W. Meyer-Erlach
- GER 320      "Geist Der Goethezeit", 2L,1T**  
 This course is a continuation of GER 220. It entails the study of works of the mature Goethe, Schiller and some of their important contemporaries. The focal point is *Faust II*.  
*Pre-requisite:* GER 220  
*Co-requisite:* GER 220 if taken in *Second Year* with P.I.  
*Instructor:* W. Meyer-Erlach
- GER 321      Nineteenth Century Prose and Poetry, 2L,1T (Not offered in 1971-72)**  
 Prose and poetry in German Literature from late Romanticism to Naturalism with emphasis on Realism. This course includes major

works of such authors as Heine, Stifter, Storm, Keller, Fontane, Meyer and Raabe.

*Pre-requisite:* GER 220/P.I.

*Co-requisite:* GER 220 if taken in *Second Year* with P.I.

*Instructor:* W. Meyer-Erlach

- GER 420     **Prose and Poetry 1885-1945, 2L,1T** (Not offered in 1971-72)  
 A consideration of significant writers in modern German Literature such as Nietzsche, George, Hofmannsthal, Thomas Mann, Rilke, Hesse, Kafka, Stadler, Heym and Trakl.  
*Pre-requisite:* GER 220/P.I.  
*Co-requisite:* GER 220 if taken in *Second Year* with P.I.  
*Instructor:* J. P. Payne

- GER 421     **Modern Drama, 2L,1T**  
 An examination of the development of this genre in German literature from the early 19th Century until the present; it includes such authors as Nestroy, Buchner, Gerhart Hauptmann, Wedekind, Kaiser, Sternheim, Brecht, Peter Weiss and Durrenmatt.  
*Pre-requisite:* GER 220/P.I.  
*Co-requisite:* GER 220 if taken in *Second Year* with P.I.  
*Instructor:* J. P. Payne

- GER 422     **Contemporary Literature, 2L,1T** (Not offered in 1971-72)  
 German Literature in the second half of the 20th Century and its re-integration into *Weltliteratur*. Included are such authors as Seghers, Nossack, Boll, Celan, Aichinger, Borchert, Grass, Martin Walser, Hans Magnus Enzensberger and Kunert.  
*Pre-requisite:* GER 220/P.I.  
*Co-requisite:* GER 220 if taken in *Second Year* with P.I.  
*Instructor:* W. Meyer-Erlach

- GER 429E     **Directed Reading and Study**  
 This course is reserved for those who have completed, or are in the process of completing, the requirements for specialist standing. It will prepare the student for specialization at the graduate level by deepening his appreciation of the essential aspects of German literature, in the context of cultural, socio-political, and historical developments.  
 Fourth year students only.  
*Pre-requisite:* Completion of specialist requirements.  
*Instructor:* W. Meyer-Erlach

## HISTORY

Faculty Adviser: Mr. M. Dafoe

A recent University of Toronto publication suggests that, *Every subject taught in a university has a social context. History, in particular, is relevant to the study of disciplines no matter how specialized. The study of history leads the student into the records of mankind. This past illuminates, although it may not directly guide, the conditions of the present. To have no interest in history is to have no interest in the present, no reasonable view of the future and no analysis of oneself.*

Both in response to a greater demand and a larger enrolment, the basic course in Western Civilizations will be supplemented by new offerings in Canadian, American and European history. This opportunity for concentrated work in specialized areas of interest will provide our students with a more balanced programme, thereby giving them an opportunity to discover that history is not only a dialogue between past and present but, as has already been indicated, a tool for self-understanding and further intellectual growth.

In addition, a history concentration can provide students with the requisite mental discipline and analytic skills for work in a variety of chosen fields, from teaching and the law to a career in the civil service and journalism.

- HIS 100E     Europe and the World, 1789-1969, 2L,1T**  
 Modern Europe from the French Revolution to the 1960s with special emphasis on Europe's relations with other parts of the world. Political, economic, social and cultural aspects will be covered.  
*Instructor: M. Dafoe*
- HIS 200E     The United States 1607-1968, 2L,1T**  
 (I) An introduction to American History, from the earliest colonial settlements to the present. Primary attention devoted to political developments, but economic, social and intellectual factors will also be examined.  
*Instructor: TBA*
- HIS 203E     Latin America—Survey, 2L,1T**  
 The history of Latin America: political, social, economic and cultural. Special emphasis may be given to particular countries.  
*Instructor: D. Raby*
- HIS 204E     Italy—Survey, 2L,1T**  
 A general survey of the history of Italy: political, social, economic and cultural.  
*Instructor: C. La Vigna*
- HIS 205E     Canada 1663-1967, 2L,1T**  
 (I) A survey of the political, social and economic history of Canada, topically treated.  
*Instructor: D. Morton and TBA*

- HIS 206E Russia—Survey, 2L, 1T**  
A general survey of the history of Russia: political, social, economic and cultural.  
*Instructor: TBA*
- HIS 294 Survey of Spanish History, 2L** (Not offered in 1971-2)  
Same as SPA 394.
- HIS 301E Canadian Parties & Politics Since 1867, 2L**  
An examination of federal and provincial politics with special emphasis on the electoral process and the developing sociology of the Canadian party system.  
*Instructor: D. Morton*
- HIS 302E Race and Ethnic Minorities in American History** (Not offered in 1971-72)  
Concepts of nationality and race and the problems of assimilation and acculturation of the immigrant, the Negro, the Indian, in America's past.  
*Instructor: W. B. White*
- HIS 303E International Relations 1870-1960, 2L**  
The international relations of the European powers at their zenith and in decline. The economic and social framework will be examined as well as the political conflict.  
*Pre-requisite: P.I.* (Preference will be given to third and fourth year students).  
*Instructor: M. Dafoe*
- HIS 304E The Mexican Revolution 1910-1940, 2L**  
A study of the Revolution from the Diaz dictatorship to the presidency of Cardenas. Conflicting interpretations of the significance and achievements of the Revolution will be examined.  
*Pre-requisite: P.I.* (Preference will be given to third and fourth year students).  
*Instructor: D. Raby*
- HIS 305E Industrialization and Ideological Response, 2L**  
The impact of industrialization on 19th and 20th Century Europe and the intellectual response to the altered economic, social and political structure.  
*Pre-requisite: P.I.* (Preference will be given to third and fourth year students).  
*Instructor: C. La Vigna*
- HIS 306E 19th Century Britain, 2L, 1T**  
The major themes of British history from the late 18th Century: the emergence of industrial society, the fate of aristocracy, religion,

cultural and intellectual change, foreign relations, constitutional development and political history.

*Instructor:* M. Dafoe

**HIS 307E Canadian History from Contemporary Issues, 2L**

The examination of Canadian contemporary problems in their historical context.

*Pre-requisite:* P.I. (Preference will be given to third and fourth year students)

*Instructor:* D. Morton and TBA

**HIS 308E Canadian History—Special Topic, 2L**

*Pre-requisite:* P.I. (Preference will be given to third and fourth year students)

*Instructor:* TBA

**HIS 309E American History—Special Topic, 2L**

*Pre-requisite:* P.I. (Preference will be given to third and fourth year students)

*Instructor:* TBA

**HIS 310E Eastern Europe—Special Topic, 2L**

*Pre-requisite:* P.I. (Preference will be given to third and fourth year students)

*Instructor:* TBA

**HIS 393 Twentieth Century Spanish History, 2L**

Same as SPA 393

**HIS 401E Independent Reading**

An independent study of area of particular interest to the student, carried out under the supervision of a staff member.

*Pre-requisite:* P.I.

*Instructor:* Staff

**HIS 402E Historiography Seminar, 2L**

A study of the historian and his craft: attention will be given to important historians from classical times to the present as well as to historical source material and research methods.

*Pre-requisite:* P.I.

*Instructor:* Staff

### INTERDISCIPLINARY COURSES

These are courses that overlap the traditional interests of two or more disciplines. Some of these courses are given two separate numbers and are described under each discipline, e.g.

CHM 270EF and BIO 270EF  
 CHM 271ES and BIO 271ES  
 ENG 376 and GLI 376  
 MAT 204EF and PHL 250EF  
 MAT 209ES and PHL 353S  
 SPA 393 and HIS 393  
 SPA 394 and HIS 294

Others are joint courses not listed under particular subjects and these are described here. UNI 100 is described separately at the end of the course listings.

**CMM 220ES Communications I, 2L**

- (I) Fundamentals of information theory. The effect of technological developments on communications past, present and future. Communications among the lower animals. Sociological implications of communications and mass media.

**CMM 320E Communications II (May not be offered 1971-72)**

This is a course designed to familiarize students with the media of radio, TV and print. The preparation of academic material for presentation within these media will be explored. Seminars, guest lecturers and practica will be included in the curriculum.

**DRA 200E Drama Through Acting, 2L,3P**

Practical work in acting and producing plays as a means of understanding and interpreting drama. Approximately four plays taken from different areas of drama. Lectures and seminars will also be held on the plays chosen and their background.

*Pre-requisite: P.I.*

**JSP 200 Simulated Society, 2L**

*Simulated Society* is a unique game which has been developed to make material in Philosophy and the Social Sciences more vivid to university students. Twenty or more players participate as citizens of a simulated society. *Simulated Society* creates a situation in which the student must actively question the nature of the social order and examine the processes of social conflict and social control. Each student will be issued a participants manual containing the rules and associated readings. The instructors are drawn from Philosophy, Psychology and Sociology. Courses in the three disciplines closely associated with the *Simulated Society* material include PHL 216F, PHL 314S, PSY 203F, PSY 365ES and soc 202.

## ITALIAN

Faculty Adviser: Mr. L. McCormick

Italian is a worthy and even indispensable aid to studies of other literatures, especially French, Spanish and English. "Exciting" may seem a trite adjective, but one can certainly be swept along by the study of the Renaissance in Italy. A first-hand study of Machiavelli's own writings will also serve to rescue him from standard misinterpretations, and reading Michelangelo's literary works will complete one's view of his overall genius. And so one could continue from the beginnings of Italian literature to the present creative surge.

One can also mention the inherent beauty of spoken Italian with its vastly varying dialects from the top to the bottom of the "boot".

A fuller comprehension of the literary, linguistic, cultural and historical facets of Italian civilization is the goal of our programme of studies.

Graduates in Italian are in demand and will continue to be. Knowledge of another language and culture is regarded favourably by other disciplines and is frequently required for graduate-level studies. There are career opportunities in teaching, foreign affairs, trade and law.

- ITA 100      *Beginning Italian*, 3L,2P**  
 Grammar, translation, oral work, with a view to providing basic conversational and writing skills.  
*Instructor: TBA*
- ITA 201E      *Continuing Italian*, 2L,1P (Conversazione)**  
 (I) A comprehensive review of Italian grammar that will develop the student's power of expression through composition and translation of literary passages of interest. Italian will be used as much as possible in the class.  
*Pre-requisite: ITA 100/Gr. XIII ITA and P.I.*  
*Instructor: TBA*
- ITA 202E      *Italian Short Stories and Plays*, 2L**  
 (I) The short story ("novella"), so vitally important throughout Italian literature, should both interest and delight. Selections include "novelle" by Boccaccio, some authors of the Renaissance, and Verga, Buzzati, Moravia, and others. Also to be read are plays by authors such as: Giacosa, Pirandello and Betti.  
*Pre-requisite: ITA 100/Gr. XIII ITA/P.I.*  
*Instructor: TBA*
- ITA 260E      *Yesterday, Today and Tomorrow—Italy*, 2L**  
 (I) A course examining the many faces of Italy from about 1920 up to 1971. Contemporary Italian literature is rich and provocative and will serve as a focal point for the culture course. We will make use of the

available English translations. Indeed, the fact that so much of contemporary Italian literature is available in other languages demonstrates its power of communication. This will not be only a literature course. Miss La Vigna of the History Department will provide us with historical background, including discussions of fascism and communism. We are planning to offer lectures on modern Italian music and art by visiting experts and to present a series of Italian films (by Fellini, Antonioni, etc.) to round out the multi-disciplinary aspects of this course. (Not for specialization requirement.)

*Instructor:* TBA

ITA 300E

**Italian Literature, 2L**

(I)

A survey of Italian Literature from its beginnings to approximately 1600. It serves as an introduction to the poetry and prose, and the types and styles of Italian literature. Dante, Petrarch, Boccaccio, Machiavelli are some of the authors to be discussed. Recommended as background preparation for all other Italian literature courses.

*Pre-requisite:* ITA 201E/P.I.

*Instructor:* TBA

ITA 301EY

**The Modern Italian Novel, 1L,1T**

(I)

Svevo, the novelist from Trieste who was discovered by James Joyce, will be the first of a series of novelists to be studied. Others will include Pirandello, Silone, Vittorini and Moravia. The novels will include those most recently published.

*Pre-requisite:* ITA 201E/P.I.

*Instructor:* TBA

ITA 302S

**The Italian Theatre from the Futurists to the 1960s, 2L**

(I)

The germ of the present-day French theatre of the absurd is to be found in the earlier Teatro Grottesco with its dramatists such as Rosso di San Secondo and Chiarelli. Their influence on Pirandello is indisputable. Italian drama and comedy continue to surprise, depress or elate, with works by Betti, Fabbri and DeFilippo.

*Pre-requisite:* ITA 201E/P.I.

*Instructor:* TBA

ITA 303EY

**Italian Poetry in the 20th Century—Crisis and Rebirth, 1L**

(I)

The decadentism of Pascoli and D'Annunzio had left Italy, traditionally a land of poets, stagnating in its own tradition. The search to revitalize Italian poetry began with the urge to "tell it like it is". The result was an exciting rebirth which has continued to flourish, whether through the work of the better known Saba or Quasimodo or of the post-war poets like Sereni, or the still more recent neo-Marxists such as Fortini.

*Pre-requisite:* ITA 201E/P.I.

- ITA 310E **The Divina Commedia of Dante, 2L**  
 (I) Dante's Comedy has been translated into many languages and many times into English. Its influence is well known and continues in the twentieth century through Ezra Pound and T. S. Eliot and even LeRoi Jones. This course will deal specifically with Dante's *Inferno* and *Purgatorio*.  
*Pre-requisite:* ITA 201E/P.I.
- ITA 311EY **The Decameron of Boccaccio, 1L**  
 (I) A concentrated study of Boccaccio's major work in its entirety. He was, as well, a writer of literary theory, criticism and philosophy.  
*Pre-requisite:* ITA 201E/P.I.
- ITA 313E **Petrarca e Petrarchismo, 2L** (Not offered in 1971-72)  
 (I) Why has Petrarch's poetic influence been felt by so many writers of so many countries (i.e. Ronsard in France, Garcilaso in Spain, Donne in England, Hooft in Holland, Bärghio in Sweden, etc.)? We will seek to answer this question by a study of Petrarca in his prose as well as in his *Rime*, and of other Italian poets influenced by him: Poliziano, Lorenzo, Tansillo, Marino, etc.  
*Pre-requisite:* ITA 201E/P.I.
- ITA 321E **The Italian Epic in the Sixteenth Century, 2L**  
 (I) Ariosto's *Orlando furioso* and Tasso's *Gerusalemme liberata* influenced such famous writers as Cervantes, Spenser, Milton and Montaigne. The reasons will appear after a detailed study of the two works, each having similarities and differences in spirit and substance. Ariosto writes of women, knights, arms, loves and wild adventures and Tasso declares his intent to treat of a spiritual cause but has difficulty restraining his sensual self.  
*Pre-requisite:* ITA 201E/P.I.
- ITA 340EY **Creative Italian, 1L,1P**  
 Assumes you have mastered the basic rules and are ready to play the game. An advanced language course which goes beyond the mechanics of translation. A more subtle and flexible knowledge of Italian and of the means of self-expression are the purposes of this course.  
*Pre-requisite:* ITA 201E/P.I.  
*Instructor:* TBA
- ITA 390ES **Verga e La Tristezza Faticosa Del Vivere, 2L** (Not offered in 1971-72)  
 (I) 1971-72)  
 The novels and short stories of Giovanni Verga, Sicilian and Italian, whose characters endure the hopelessness of life.  
*Pre-requisite:* ITA 201E/P.I.  
*Instructor:* TBA

- ITA 399ES **Pirandello: Life vs Form, 2L** (Not offered in 1971-72)  
 (I) Although Pirandello died in 1936, the dramatization of his conception of life which aroused controversy when first presented is still disturbing. Much of today's theatre can be traced to Pirandello's influence.  
*Pre-requisite:* ITA 201E/P.I.  
*Instructor:* TBA
- ITA 421F **Italian Theatre up to the Novecento, 2L**  
 (I) The success of Italian comedy has never been doubted, from the masterpieces of Machiavelli, Bibbiena and Ariosto in the Cinquecento to Goldoni's reform of the Commedia dell'Arte. The genre of tragedy poses another problem: despite the contributions of Alfieri and Parini in the 18th century or those of Manzoni in the Romantic period, why do many dramatic historians consider the Italians incapable of writing great tragedy?  
*Pre-requisite:* ITA 201E/P.I.  
*Instructor:* TBA
- ITA 430S **Storia Della Lingue Italiana, 2L**  
 (I) Dal latino all'italiano di oggi: lo sviluppo della lingua italiana sotto l'influsso di eventi culturali, storici e politici.  
*Pre-requisite:* ITA 201E/P.I.  
*Instructor:* TBA
- ITA 440Y **Creative Italian II, 1L**  
 (I) A continuation of ITA 340EY.  
*Pre-requisite:* ITA 340EY/P.I.  
*Instructor:* TBA
- ITA 470E **What is Romanticism in Italy? 2L**  
 (I) This is a fundamental problem in Italian Studies, since the Romantic era is not as clearly defined as in French or in German literature and, in fact, is quite confusing. Thus, we will try to find an answer or answers by concentrating on Foscolo, Leopardi and Manzoni and by looking at minor figures, and historical background.  
*Pre-requisite:* ITA 201E/P.I.  
*Instructor:* TBA

## MATHEMATICS

Faculty Adviser: Professor S. M. Trott

There are many different motivations for the study of Mathematics. To the humanist, Mathematics is a part of the mainstream of human culture, and he is likely to regard his subject as an art. To the scientist or social scientist it affords analytical and descriptive devices which greatly illuminate theory. To the engineer and

economist it is an important working tool. To the mathematician, it is an end in itself. Mathematics endeavours to provide courses to suit all of these viewpoints.

The professional mathematician is most likely to find employment in universities, in the civil service or in government laboratories, and in financially or technologically oriented business firms. Research positions require post-graduate study. Such fields as teaching, computing, applied statistics, and actuarial science offer opportunities for graduates. A training in Mathematics has traditionally been a strong preparation for careers in law and business; today it is also an excellent foundation for further work in a wide variety of fields in the science and social sciences.

The sequential nature of Mathematics means that pre-requisites are essential in most courses and that, as a rule, it is disastrous to fall behind in a course. In other words, good preparation and steady work are essential to successful completion of a mathematics course, and students without the one and/or unwilling to engage in the other are advised to avoid the subject. Where pre-requisites are stated, they may be waived for students who can demonstrate adequate knowledge.

First year students with adequate preparation who want a substantial mathematics course either for its own sake or in conjunction with another field of study are advised to take MAT 135E. All serious students should also take Mathematics 140E. Most students find MAT 140E more difficult than MAT 135E. The half courses MAT 110EF/ES and MAT 120EF/ES are intended for students seeking less demanding courses. They afford an entry into Mathematics for the student who omitted or did poorly in Grade 13 Mathematics.

**APM 236S Numerical Methods, 2L,1T**

- (I) Solution of non-linear equations, approximations, quadrature, solution of systems of linear equations, eigenvalues and eigenvectors, differential equations. Exercises requiring use of a computer will be assigned.

*Pre-requisites:* CSC 108F, MAT 135E

*Instructor:* C. R. Crawford

**APM 246ES Mechanics, 2L,1T**

Vectorial mechanics of particles and rigid bodies. Problems in waves. Introduction to lagrangian dynamics.

*Pre-requisite:* MAT 244F

*Instructor:* J. Marsden

**APM 251ES Applied Mathematics I, 2L,1T (Not offered in 1971-72)**

Asymptotic and approximate solutions of ordinary differential equations. Comparison equations, W.K.B. and local turning point approximations, error bounds. Regular and singular perturbations. Applications to physical problems.

*Pre-requisite:* MAT 244F

*Instructor:* TBA

- APM 351E **Applied Mathematics II, 2L,1T**  
 Partial differential equations of applied mathematics, mathematical models of physical phenomena, basic methodology.  
*Pre-requisite:* APM 246ES  
*Instructor:* W. D. Lakin
- CSC 108F **Computer Programming, 2L,2T**  
 Algorithms and flow charts. An introduction to stored-program computers and Fortran programming. Elementary applications in data processing, scientific calculations, non-numerical problems, and simulations. (May not be combined with CSC 148Y, CSC 238F.)  
*Instructor:* C. R. Crawford
- CSC 248S **Programming Languages and Applications, 2L,1T**  
 (I) The syntax and semantics of various programming languages, including both algebraic and symbol manipulation languages; data structures; numerical and non-numerical applications.  
*Pre-requisites:* CSC 108F, MAT 135E  
*Instructor:* C. R. Crawford
- CSC 258F **Computer Organization and Assembly—Language Programming, 2L,1T**  
 Modular programming, decision tables, table-oriented logic, computer structure, machine language, addressing techniques and digital representation of data.  
*Pre-requisites:* CSC 108F, MAT 135E  
*Instructor:* TBA
- MAT 110EF **Introductory Calculus, 2L,2T**  
 (Intended for students who did not take or did poorly in Mathematics “A”) Differentiation and integration of elementary functions with applications.  
 (May not be combined with: MAT 135 except by students who are ineligible to enrol in MAT 135 and who take this course to become eligible.)  
*Instructor:* M. Mather
- MAT 110ES **Introductory Calculus, 2L,2T**  
 (Intended for students who did not take or did poorly in Mathematics “A”) Differentiation and integration of elementary functions with applications. (May not be combined with: MAT 135 except by students who are ineligible to enroll in MAT 135 and who take this course to become eligible.)  
*Instructor:* TBA

**MAT 120EF Finite Mathematics, 2L,2T**

Vectors and linear transformations. Matrices and their properties. Notions of probability. Applications to linear programming, game theory, and Markov chains.

(May not be combined with: MAT 135 except by students who are ineligible to enroll in MAT 135 and who take this course to become eligible.)

*Instructor:* J. Marsden

**MAT 120ES Finite Mathematics, 2L,2T**

Vectors and linear transformations. Matrices and their properties. Notions of probability. Applications to linear programming, game theory, and Markov chains.

(May not be combined with: MAT 135 except by students who are ineligible to enroll in MAT 135 and who take this course to become eligible.)

*Instructor:* TBA

**MAT 135E Calculus and Linear Algebra I, 2L,2T**

Integral calculus of real functions. Topology of real vector spaces. Linear transformations. The derivative of a vector function, Jacobian matrix, chain rule. Applications to geometrical problems, to the kinematics of a particle, and to differential geometry of curves.

(May not be combined with: MAT 110EF, 110ES, 120EF, or 120ES, but see note in descriptions of these.)

*Pre-requisites:* XIII Maths A (75% or better) & B (Students without XIII Maths B may enroll if they also enroll in MAT 120EF)

*Instructor:* T. Bloom

**MAT 140E Abstract Mathematics, 2L,2T**

1. Inequalities and topology of the real numbers. Properties of continuous functions.
2. Introduction to the concepts of abstract algebra including groups and rings.

*Pre-requisites:* XIII Maths A & B (Students without XIII Maths B may enroll if they also enroll in MAT 120EF)

*Instructor:* P. H. H. Fantham

**MAT 204EF Modern Symbolic Logic, 2L,1T**

- (I) (Same as PHL 250F) Symbolic logic provides precise and efficient techniques for analyzing informal reasoning. It is therefore useful in fields as diverse as law, philosophy, mathematics, and computer science. The most profound theorems of mathematics, having

important philosophical implications, have come from the study of symbolic logic.

*Instructor:* A. I. F. Urquhart

**MAT 209ES Set Theory, 2L,1T**

(I) (Same as PHL 353S) Does the barber who shaves just those who don't shave themselves shave himself? Is there a number bigger than infinity? Set theory is simultaneously the source and the solution of philosophical and mathematical paradoxes. In addition, it is the mathematics underlying all of mathematics.

*Pre-requisite:* MAT 204EF (formerly PHL 206F)

*Instructor:* F. D. Tall

**MAT 235E Calculus and Linear Algebra II, 2L,1T**

A continuation of MAT 135E. Orthogonality. Mean value theorem, Taylor's approximation. Implicit and inverse function theorems. Multilinear algebra, determinants. Integration of vector functions, change of variable formula. Applications to extremes and probability.

*Pre-requisite:* MAT 135E

*Instructor:* S. M. Trott

**MAT 240E Algebra, 2L,1T**

A continuation of MAT 140E including rings, integral domains, fields, polynomials, field extensions, and other topics.

*Pre-requisite:* MAT 140E

*Instructor:* S. M. Trott

**MAT 244F Differential Equations, 2L,1T**

Ordinary differential equations of first and second order. Solution by series and integrals. Systems of first order, linear differential equations. Applications to physical problems.

*Pre-requisite:* MAT 135E

*Instructor:* C. R. Crawford

**MAT 301 Topics in Mathematics, 2L,1T**

A selection from: number theory, geometry, topology, graph theory, probability, models in the social sciences, history of mathematics.

*Pre-requisite:* Two full courses in Mathematics

*Instructors:* M. Mather and F. D. Tall

**MAT 335E Vector Calculus, 2L,1T**

A continuation of MAT 235E. Elementary calculus on manifolds, Stokes' theorem. Complex variable theory, residue calculus, boundary value problems.

*Pre-requisite:* MAT 235E

*Instructor:* J. E. LeBel

- MAT 340E    Advanced Abstract Mathematics, 2L,1T**  
 A high level course in one or two areas of abstract mathematics, e.g., Algebra, Topology, Geometry.  
*Pre-requisite:* MAT 240E  
*Instructor:* TBA
- MAT 399Y    Independent Work in Mathematics**  
 A prospective student should select his topic and adviser before the end of second year and discuss the topic with his adviser.  
*Pre-requisite:* Acceptance by an adviser.
- STA 202EF    Statistics, 2L,2T**  
 (I)    The purpose of this course is to acquaint beginning students in the biological, physical and social sciences with the fundamentals of statistics. The course discusses statistical procedures for describing large quantities of data and for making inferences about population on the basis of samples.  
*Instructor:* TBA
- STA 232    Introduction to Statistics, 2L,1T**  
 (I)    Elements of probability theory, common distributions, point and interval estimation, standard significance tests, introduction to least squares and analysis of variance.  
*Pre-requisite:* MAT 135E, or MAT 110EF/S and MAT 120EF/S  
*Instructor:* J. E. LeBel
- STA 332F    Experimental Design, 2L,1T**  
 The statistical aspects of collecting and analyzing experimental data, analysis of variance, orthogonal designs.  
*Pre-requisite:* STA 232  
*Instructor:* I. MacNeill
- STA 342S    Regression Analysis, 2L,1T**  
 Regression theory with applications to the analysis of non-orthogonal data.  
*Pre-requisite:* STA 332F  
*Instructor:* I. MacNeill
- STA 357    Probability, 2L,1T (Not offered in 1971-72)**  
 A thorough treatment of joint probability distributions, sequences of random variables, generating functions, law of large numbers and central limit theorem in Bernoulli case, introduction to Markov chains.  
*Pre-requisite:* STA 232

PHILOSOPHY

Faculty Adviser: Professor W. J. Huggett

Philosophical problems are distinguished by their continuing fascination for the human mind and by their perennial elusiveness. But when even moderate progress is made, the impact upon the world of learning is often enormous. Revolutions in thought that shake the foundations of the existing sciences have occurred and exciting new disciplines have emerged. In addition, perplexing difficulties have been uncovered in the underpinnings of the natural and social sciences as well as in the presuppositions of morality, freedom, responsibility, religion, and conventionally accepted values.

The role of the philosopher is that of Socrates, the self-styled “gadfly”, who refuses to *play* your game but insists on examining it critically instead. He asks *why* you made that move, recommends alternative strategies, and may even question the value of the game itself. Socrates was the first philosopher-kibitzer and he was put to death.

We invite you to kibitz with us and acquire the tools and techniques necessary for the conceptual clarification and critical evaluation of the life and thought of the present and of past ages. Apart from the physical hazard mentioned above, a scrutiny of your own most cherished convictions and deeply-rooted beliefs may well blow your mind.

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The “specialist” programme in Philosophy is defined as the successful completion of at least 12 half courses from those numbered 200 and above.

\* \* \* \* \*

Although all courses in Philosophy are listed as half courses (with the exception of PHL 100), most of them are planned as the Fall or Spring portion of a single year-long course and are normally taught by the same instructor in both terms. Since related first and second term courses are not always listed consecutively they are indicated by the words “in sequence with” followed by the number of the related course.

PHL 100     **Introduction to Philosophy, 2L,1T**  
An examination of a wide range of representative and important philosophical questions, such as: are moral standards relative to one’s society? Do human beings have freedom of the will? Are there rational grounds for belief in the existence of God? Is there such a thing as altruistic motivation? What is the relation between a person’s mind and his body? Topics in semantics, logic and scientific method are also discussed with a view to avoiding certain common errors in reasoning.  
*Instructor:* Staff

No course in Philosophy at the 200 level has any pre-requisites.

**PHL 200s Reason and Morality, 2L**

Can we function as human beings in society without some form of morality? We do in fact level moral accusations, express moral indignation, pass moral judgments, allot praise and blame, and justify our own actions, but how can anyone know what is morally right? And why should anyone do what is right when it is not to his advantage? This course examines the relation between reason and morality in interpersonal relations and considers arguments for hedonism, utilitarianism, emotivism and egoism. (In sequence with PHL 205F.)

*Instructor:* TBA

**PHL 202F Aesthetics, 2L**

What is a hoax? How does one distinguish between a *genuine* work and a sham or a hoax or a fraud? In dealing with these questions light is shed on traditional puzzles in a wide range of art forms and media. Students who wish to concentrate upon one particular art form such as literature or music are encouraged to do so. (See also PHL 291s)

*Instructor:* TBA

**PHL 204s Literature and Philosophy, 2L**

Man's nature, his relation to his fellows and his place in the universe are all themes that have received significant literary and philosophical attention. Several major works of literature ranging all the way from Greek tragedy to science fiction are examined with a view to clarifying and evaluating the philosophical doctrines they reveal and reflect. Among the authors studied are Sophocles, Camus, Brecht, Golding, Dostoevsky, Tolstoy and Kafka.

*Instructor:* TBA

**PHL 205F Contemporary Social Issues, 2L**

Sexual morality and marriage; abortion, drugs, and the law; women's liberation, capital punishment and pollution are among the issues raised. The structure and validity of the arguments employed are investigated and the tenability of various moral and other principles which they contain is examined. (In sequence with PHL 200s.)

*Instructor:* TBA

**PHL 210F The State and the Citizen, 2L**

The role of civil disobedience in a democratic society, the distinction between violent and non-violent modes of social action, and the validity of present-day political radicalism. The views of contemporary social critics and philosophers on these and related themes are analyzed and assessed in order to throw light on such basic notions of political

philosophy as the nature of the state, its justification and proper limits, and the obligations of citizens. (In sequence with PHL 312s.)

*Instructor:* TBA

**PHL 213s    The University and Society, 2L**

A philosophical examination of the goals and function of a university in society. What is the social function and justification of granting degrees, conducting examinations or making academic evaluations? What does society demand of a university and what should it demand? Can and should a university remain politically isolated? These questions are dealt with in the light of critical examination of current work in the philosophy of education, including writings by Paul Goodman and Noam Chomsky.

*Instructor:* TBA

**PHL 216F    Deviance and Abnormality, 2L**

The notions of “deviance” and “abnormality” in the social sciences raise questions in theory of knowledge and ethics. According to what criteria do we decide that an action is “unnatural”, a person is “insane” or “abnormal”, a life-style is “deviant” or a political view is “irrational”? Is the application of these labels always arbitrary, subjective and culture-bound, or can it have some basis in human nature? (In sequence with PHL 314s.)

*Instructor:* TBA

**PHL 220s    Belief, Knowledge and Truth, 2L**

Gullibility and credulity, fads and fallacies, hoaxes in science, religion and the arts. Against this background we deal with basic topics in the theory of knowledge, such as: certainty and skepticism, the subjectivity of perception, reason and rationality, theories of truth, and the criteria and justification of claims to know.

*Instructor:* TBA

**PHL 230F    Existentialism and Phenomenology, 2L**

Sartre and Camus have helped make existentialism the most widely discussed philosophy of the present day. Existentialism derives in part from the work of phenomenologists who first stressed the philosophical importance of detailed and accurate descriptions of mental states and processes. The techniques of phenomenological analysis have been used by existentialists to provide a general description of the human condition—that relation between essence and existence which is peculiar to man. Both existentialism and phenomenology are analyzed and evaluated in this course.

*Instructor:* TBA

**PHL 232S The Philosophy of Bertrand Russell, 2L**

“Three passions, simple but overwhelmingly strong, have governed my life: the longing for love, the search for knowledge and unbearable pity for the suffering of mankind”. (Russell). Throughout his long career, Russell has been associated with issues such as the emancipation of women, civil liberties and opposition to wars. He has invariably supported the individual as opposed to civil or religious authority and the spirit of free enquiry as opposed to dogma. We concentrate here on the social and political aspects of Russell’s thought.

*Instructor:* TBA

**PHL 240F The Birth of Philosophy I: To Plato, 2L**

(I) Is morality merely an instrument in the hands of those who control the state? In answering this question Plato sketches the first account of a utopian society and deals with every important philosophical topic: the subjectivity of perception, the nature of knowledge, the relation between mind and body, the conventionalism or relativism of morality. Plato is the first major philosopher and his influence has been enormous. (In sequence with PHL 241s.)

*Instructor:* TBA

**PHL 241S The Birth of Philosophy II: Aristotle and After, 2L**

(I) Aristotle, like his teacher Plato, deals with every important philosophical issue including the nature of the universe, God, man in society, and metaphysics and, like Plato, he leaves the stamp of his own genius upon each. His views largely determined thinking on these matters until the time of the Renaissance and they continue to exert a powerful though little-noticed influence upon the thought of our own day. We therefore stress the contemporary relevance of the doctrines examined. (In sequence with PHL 240F.)

*Instructor:* TBA

**PHL 243F The Age of Reason: 17th Century Thought, 2L**

This great formative era of modern philosophy is marked by the decline of mediaeval conceptions and the rise of modern science. Under the influence of the newly-emerging world-view, philosophers in this “age of reason” developed original analyses of knowledge and certainty, appearance and reality, freedom and necessity, mind and matter, deduction and experiment. Hobbes, Descartes, Spinoza and Locke are examined in some detail and others to a lesser extent. (In sequence with PHL 244s.)

*Instructor:* TBA

- PHL 244s     The Age of Enlightenment: 18th Century Thought, 2L**  
 The philosophers of this period developed further the insights of their predecessors. Berkeley is noted for his subtle and ingenious arguments whereby he challenges the reality of an external world of material objects. Hume is the major British philosopher and is renowned for his skeptical attacks upon established beliefs and doctrines. Kant, the major German philosopher, has been a most powerful influence dominating the thought of the nineteenth century. Other philosophers of the time are examined to a lesser extent. (In sequence with PHL 243F.)  
*Instructor: TBA*
- PHL 250F     Modern Symbolic Logic, 2L**  
 Symbolic logic provides precise and efficient techniques for analyzing informal reasoning. It is therefore useful in fields as diverse as law, philosophy, mathematics, and computer science. The most profound theorems of mathematics, having important philosophical implications, have come from the study of symbolic logic (Same as MAT 204EF.)  
 (In sequence with PHL 353s.)  
*Instructor: TBA*
- PHL 261s     Philosophy of Religion, 2L**  
 What is the nature of religious belief and is it justifiable? In attempting to answer this and related questions we study primitive religion, three Eastern religions (Confucianism, Taoism, and Buddhism), the ontological argument for the existence of God, the Freudian critique of religion, and the relationship between science and religion. (In sequence with PHL 290F.)  
*Instructor: J. V. Canfield*
- PHL 280F     Persons, Minds and Bodies, 2L**  
 What is a person? Is a person a body animated by a mysterious ghostly entity called a "mind" or a "soul"? Or should we say that when we talk of minds we are *really* talking about brains or about behaviour? We examine criteria of identity of persons over time and the justification of claims that the bodies we see are bodies of persons having thoughts and experiences like our own.  
*Instructor: TBA*
- PHL 281s     Philosophical Psychology, 2L**  
 Are some problems in psychology fundamentally conceptual in nature and not amenable to solution by the experimental method? Modern philosophical techniques of philosophical analysis are introduced and used to throw light on this question and others that arise where philosophy and psychology overlap.  
*Instructor: J. V. Canfield*

**PHL 282S Language and Communication, 2L**

Human language as a system of communication has had a profound impact on the way in which we organize and manipulate our environment. This influence was accelerated by such inventions as writing and the printing press. Have the electronic mass media of the present day produced further and revolutionary changes in our world-view and modes of awareness? We deal with these questions by examining the internal structure of language and the relation of language to the world and the human mind.

*Instructor: TBA*

**PHL 283S The Analysis of Propaganda, 2L**

A philosophical examination of various techniques of persuasion including psychological warfare, indoctrination, brainwashing and advertising. Topics include the emotive use of language, persuasive definitions, informal fallacies, the ethical presuppositions of propaganda, and the relevance of contemporary analyses of morality to propaganda wars. The material examined includes black power literature, student protest literature, and Quebec separatist documents, as well as classical works such as the Communist *Manifesto* and Mill's *Utilitarianism*.

*Instructor: A. Rosenthal*

**PHL 290F Miracles, Mystics, and the Occult, 2L**

A study of paranormal phenomena, the significance of the occult sciences, the possibility of miracles, disembodied existence, drug-induced states of mind and genuine mystical experiences. A selection will be made from an extensive philosophical literature dealing with these topics. (In sequence with PHL 261F.)

*Instructor: J. V. Canfield*

**PHL 291S Film Aesthetics, 2L**

A selection of films from a variety of film types is shown and against this background there is a discussion of various questions concerning the aesthetics of film, such as: principles of film criticism; film space; form and content; the function of editing; acting; potentialities and limitations of the medium; "reality" in cinéma vérité. (See also PHL 202F.)

*Instructor: J. V. Canfield*

The general pre-requisite for 300 level courses is three half courses in Philosophy (PHL 100 counts as two half courses). However, where a particular course is specified by number as a pre-requisite, only that course is required.

**PHL 312S      Philosophy of Law, 2L**

Law, paradoxically, provides both shackles and freedom. Is the law's double aspect due to the unique role it plays in organized societies and states? Can there be law without coercion? Should the law legislate morals? What is the rationale of legal punishment? Are judicial decisions arbitrary? Classical and contemporary theories of jurisprudence are assessed according to the answers they provide to these and related questions. (In sequence with PHL 210F.)

*Pre-requisites:* Two half courses in Philosophy or the Social Sciences: PHL 210F is recommended.

*Instructor:* M. Schiller

**PHL 314S      Philosophy of Social Science, 2L**

Topics and issues include: subjectivism; objectivity and values, individualism; determinism and social change; the nature and use of models and theories; explanation in approaches like Functionalism and Behaviourism. (In sequence with PHL 216F.)

*Pre-requisites:* Two half courses in the Social Sciences/P.I.

*Instructor:* TBA

**PHL 315F      Philosophy of History, 2L**

The concepts, presuppositions, methods and types of arguments used by historians are analyzed and assessed. Among the questions examined are these: What is the role of general laws in historical explanation? Can history be objective? Is history determined? Do historical explanations differ from scientific explanations? Is history without value-judgments possible?

*Pre-requisites:* Two half courses in History or Philosophy.

*Instructor:* TBA

**PHL 347F      Nineteenth Century Philosophy, 2L**

Traditional philosophical paths of reasoning and subject matter are abandoned in this most explosive and revolutionary period of thought. Philosophers like Hegel, Marx, Kierkegaard, Comte and Nietzsche bring in new concepts such as the effect of history upon philosophy, theories of dialectical materialism, existentialism, sociology, evolution and the influence of culture. Here begin the trends which lead up to many of the dilemmas of our own day.

(In sequence with PHL 348s.)

*Pre-requisites:* Three half courses in philosophy: PHL 244s is recommended.

*Instructor:* TBA

**PHL 348S Twentieth Century Philosophy, 2L**

A survey of some main trends in contemporary philosophy including influential contributions to the fields of logical analysis, linguistics and science. Among the more important figures studied are Russell, Moore and Wittgenstein. (In sequence with PHL 347F.)

*Pre-requisites:* Three half courses in philosophy.

*Instructor:* TBA

**PHL 353S Set Theory, 2L,1T**

Does the barber who shaves just those who don't shave themselves shave himself? Is there a number bigger than infinity? Set theory is not only the source of philosophical and mathematical paradoxes but also provides the means for their solution. In addition, it is generally accepted as the mathematics underlying all of mathematics. (Same as MAT 209ES.) (In sequence with PHL 250F.)

*Pre-requisite:* PHL 250F (Same as MAT 204EF.)

*Instructor:* TBA

**PHL 396F Tutorial in Epistemology, 2T**

A concentrated examination of central topics in epistemology, e.g. necessary truth, perception, knowledge and belief. Not more than three students are assigned to each tutor.

*Pre-requisites:* Three half courses in philosophy: PHL 220s is recommended.

*Instructor:* Staff

**PHL 396S Tutorial in Epistemology, 2T**

A concentrated examination of central topics in epistemology, e.g. necessary truth, perception, knowledge and belief. Not more than three students are assigned to each tutor.

*Pre-requisites:* Three half courses in philosophy: PHL 220s is recommended.

*Instructor:* Staff

## PHYSICS

Faculty Adviser: Professor H. W. Taylor

Physics was born of a desire to understand nature in a quantitative way. Guided by experiment and intuition, physicists arrive at mathematical relations among various concepts and these are then tested and extended by further research. The courses in physics are designed to help students both to understand and use the concepts and relations which have been developed and also to appreciate the need for continual questioning of widely-accepted views. The liberal arts student should gain insight into the nature of scientific investigation, while the science student whose interest is in science other than physics should acquire a background knowledge which should lead to a deeper understanding of his own discipline.

The present programme in Physics at Erindale College employs the most up-to-date demonstration apparatus and undergraduate laboratory facilities. It has been designed to meet these diverse needs. With the 1971-72 session, a four-year programme leading to specialization in physics will be offered. Students wishing to specialize in physics should consult a physics professor.

**PHY 110      The World of Physics, 2L,2P**

A survey course in physics designed to meet the needs of general students of science, pre-medical and pre-dentistry students. (May not be combined with PHY 120E). (Laboratory work is identical with that for PHY 120E).

*Pre-requisite:* Gr. XIII Physics and Gr. XIII MAT A and P.I.

*Co-requisite:* MAT 135 or MAT 110EF and MAT 120ES

*Instructor:* P. P. M. Meincke

**PHY 120E    Physical Mechanics, 2L,2P**

A course in theoretical mechanics and properties of matter for students specializing in science. (May not be combined with PHY 110).

(Laboratory work is identical with that for PHY 110).

*Pre-requisite:* Gr. XIII Physics and Gr. XIII MAT A and P.I.

*Co-requisite:* MAT 135

*Instructor:* D. J. Dunlop

**PHY 220E    Electromagnetism and Modern Physics, 3L,1P**

A basic course in electricity, magnetism and some aspects of modern physics for students specializing in science.

*Pre-requisite:* PHY 110, MAT 135/ MAT 110EF, MAT 120ES/ P.I.

(Students requiring a second-year terminal course in physics may take PHY 220E with P.I.)

*Instructor:* G. I. A. Stegeman

**PHY 221EF   Thermal Physics, 2L,1P**

An introduction to thermodynamics for students specializing in science. (This course is to be combined with PHY 222ES)

*Pre-requisite:* PHY 110 (old) and P.I. (Students of Chemistry may take this course on P.I.)

*Co-requisite:* PHY 220E, MAT 244F, APM 246ES for physics students

*Instructor:* D. J. Dunlop

**PHY 222ES   Wave Motion and Physical Optics, 2L,1P**

An introduction to wave theory, interference and diffraction with applications in physical optics. This course is offered during the spring term to science specialists.

*Pre-requisite:* PHY 110 (old), PHY 221EF

*Co-requisite:* PHY 220E, MAT 244F, APM 246ES

*Instructor:* TBA

**PHY 226E    Electronics, 2L,2P**

An introduction to modern electronics designed to meet the needs of students of physical science, biology, etc.

*Instructor:* TBA

Students interested in taking 3rd and 4th year physics courses are advised to enrol in MAT 244F and APM 246E in their 2nd year as these courses are pre-requisites for the physics courses of the senior years.

**PHY 301E    Quantum Physics, 2L**

An introduction to modern physics which includes discussion of wave mechanics, atomic and nuclear physics.

*Pre-requisite:* PHY 230E, MAT 244F, APM 246ES

*Co-requisite:* APM 351E

*Instructor:* TBA

**PHY 302E    Electromagnetic Theory, 2L (Not offered in 1971-72)**

A detailed discussion of Maxwell's equations and their application to selected electromagnetic phenomena.

*Pre-requisite:* PHY 230E, MAT 244F, APM 246ES

*Co-requisite:* APM 351E

**PHY 311E    Topics in Classical Theoretical Physics, 2L**

A discussion of selected topics from advanced dynamics and the partial differential equations of mathematical physics.

*Pre-requisite:* PHY 230E, MAT 244F, APM 246ES

*Co-requisite:* APM 351E

*Instructor:* H. W. Taylor

**PHY 313E    Advanced Physics Laboratory, 3P**

A set of experiments from selected areas of physics employing advanced techniques.

*Pre-requisite:* PHY 230E, MAT 244F, APM 246ES

*Co-requisite:* APM 351E

*Instructor:* Staff

Students specializing in physics are strongly advised to take MAT 335E in addition to APM 351E in their third year, or, alternately, in the fourth year.

**PHY 400E    Quantum Mechanics, 2L**

A basic course in non-relativistic quantum mechanics with applications to problems in atomic physics, solid state physics, etc.

*Pre-requisite:* PHY 310, 311, 312, APM 351E

*Co-requisite:* MAT 335E if not taken in third year

*Instructor:* S. S. M. Wong

**PHY 401EF Statistical Mechanics, 2L**

(Must be combined with Physics 405ES)

*Pre-requisite:* PHY 230E, MAT 244F, APM 246ES

*Co-requisite:* MAT 335E if not taken in third year

*Instructor:* S. H. Vosko

**PHY 403ES Nuclear Physics, 2L**

A discussion of the basic properties of atomic nuclei and modern nuclear models.

*Pre-requisite:* PHY 406EF, PHY 310, 311, 312, APM 351E

*Co-requisite:* MAT 335E if not taken in third year

*Instructor:* H. W. Taylor

**PHY 405ES Solid State Physics, 2L**

*Pre-requisite:* PHY 401EF, PHY 230E, MAT 244F, APM 246ES

*Co-requisite:* MAT 335E if not taken in third year

*Instructor:* S. H. Vosko

**PHY 406EF Interaction of Radiation with Matter, 2L**

*Pre-requisites:* PHY 310, 311, 312, APM 351E

*Co-requisite:* MAT 335E if not taken in third year

*Instructor:* G. I. A. Stegeman

## POLITICAL SCIENCE

Faculty Adviser: Professor B. Kovrig

Political science is the study of politics and government. In general, politics are the ways in which the decisions are made about who is to rule in a society and what laws and policies are to prevail within its physical boundaries, while government is the process by which general rules are carried out. Part of political science is given over to describing specific processes or events—for example, a particular Canadian party leadership convention or such Canadian conventions generally—in somewhat the same way a biologist would describe something in physical nature. But political science will go from these particularities to generalizations. One may describe political violence in contemporary Canada within the framework of an analysis of violence in countries similar to ours or, even more generally, in all societies both past and present. The study of politics at Erindale deals not only with how politics and government *do* proceed but how they *should* be carried on in the light of a long tradition of political philosophy. Thus students will be introduced in some courses to such questions as—what tests do we apply to determine whether one kind of government is better than another? who should rule? under what conditions, if any, have people a moral obligation to disobey government?

In spite of its fascination for many people, political science is a demanding study. This is so partly because its subject-matter is very complex. But more than that, we all bring to political science opinions about what is and what ought to be which we have accepted uncritically. Here are some questions to which most people would give ready answers:

- (1) are totalitarian nations more likely to have aggressive foreign policies than have democratic countries?
- (2) is it desirable that governments should not try to “legislate morality”?
- (3) are we more likely to control environmental pollution if we vest powers over such matters in larger rather than smaller units of government?

Although most of us would be willing to make snap judgments about such questions as these, each is very complex and our opinions are probably no better founded than are those of non-experts about, say, the law of relativity or the causes of the common cold. The study of political science will not eliminate political prejudices and is not directed toward eliminating political convictions but at a minimum it gives a person more ability than he had otherwise to give an account of the basis of his beliefs both about what the political world is and what it can and should be.

**POL 100 Introduction to Canadian Politics, 2L,1T**

An introduction to the political process in Canada, including political culture and behaviour, political parties, the structure and function of political institutions, federalism, French Canada.

*Instructor: TBA*

**POL 101 Introduction to Political Science, 2L**

A reading of some important texts in political philosophy as a series of confrontations between five sets of political thinkers who were contemporaries of each other—Plato and Aristotle, Hobbes and Locke, Burke and Paine, Calhoun and Mill, Nabuhr and Marcuse. Many of the most crucial questions of politics will be raised in terms of the claims of government the limits of legitimate political authority, the nature of human rights and what kinds of knowledge we can have about politics.

*Instructor: D. Smiley*

**POL 200 History of Political Thought, 2L**

This course examines fundamental concepts and themes of the main political philosophers of the Western world from classical Greece to the modern times.

*Pre-requisite: POL 101 / P.I.*

*Instructor: A. Kontos*

- POL 202 Political Economy and Public Policy, 2L,1T**  
 This course will analyse and appraise alternative arrangements for providing basic personal services (especially health and education) in Canada, the United States and Great Britain. It will focus on the public policy issues that these activities pose for governments. Areas covered include developmental analysis, decentralization, collective choice, private government, resource allocation and application in the public sector and cost benefit analysis for “soft” outputs. A course in elementary economics is useful preparation but not essential if the student undertakes to catch up on his own.  
*Pre-requisite:* P.I.  
*Instructor:* M. J. Landauer
- POL 203 United States Politics and Government, 1L,1T**  
 The first term concentrates on the evolution of the American Constitution with particular reference to individual rights, federalism and governmental powers. The second term deals with the actual operation of government through the workings of politics and administration; it covers executive-legislative relations, parties, pressure groups, the bureaucracy, and foreign affairs.  
*Co-requisite:* POL 207F  
*Instructor:* M. J. Landauer
- POL 204 Soviet Government and Politics, 2L,2T** (First part of course lectures, second part seminars)  
 A survey of Soviet political institutions and processes, concentrating on the evolution of the Soviet political system and applying social science techniques to an analysis of current Soviet politics.  
*Co-requisite:* POL 207F  
*Instructor:* R. B. Day
- POL 205F British Government and Politics, 2L,2T** (First part of course lectures, second part seminars)  
 A survey with particular emphasis on contemporary British problems, relating these to some general themes concerning the nature, strengths and weaknesses of liberal democracy.  
*Co-requisite:* POL 207F  
*Instructor:* R. B. Day
- POL 207F Introduction to Comparative Politics, 2L**  
*Instructor:* TBA
- POL 302S Politics and Government of Western Europe, 2L**  
*Pre-requisite:* POL 207F  
*Instructor:* TBA

- POL 304     **Politics of Developing Areas, 2L**  
*Pre-requisite/Co-requisite:* POL 207F  
*Instructor:* TBA
- POL 306     **International Relations, 2L**  
 A study of international systems with emphasis on the sources and resolution of interstate conflict.  
*Instructor:* B. Kovrig
- POL 321F    **Empirical Political Theory and Its Critics, 2L**  
*Pre-requisite:* POL 101/P.I.  
*Instructor:* TBA
- POL 322F    **Problems of the Administrative State, 2L**  
*Pre-requisite:* POL 100  
*Instructor:* TBA
- POL 323     **Topics in Canadian Politics, 2L**  
 A workshop or seminar meeting weekly in two-hour sessions. Students will be responsible for completing one major research or reading project or alternatively two term projects in areas of their own choosing in Canadian politics. Sessions will be devoted to reviewing and analyzing material related to course topics and to reports on work in progress or completed.  
*Pre-requisite:* POL 100/P.I.  
*Instructor:* D. Gardner
- POL 327     **Comparative Foreign Policy (Not offered in 1971-72)**  
*Instructor:* TBA
- POL 328     **International Organization, 2L**  
 International organization and international law (the UN and League systems, etc.) as instruments for conflict resolution in the international state system.  
*Pre-requisite:* POL 101/P.I.  
*Instructor:* J. Barros
- POL 329S    **Marxism-Leninism, 2L,2T (First part of course lectures, second part seminars)**  
 A survey of Marxist political thought dealing with the works of Marx; the German Social Democrats; Lenin, Trotsky and the Russian revolution; Maoism, and the problems of modern Communism.  
*Pre-requisite:* POL 100/P.I.  
*Instructor:* R. B. Day

- POL 400F Twentieth Century Political Thought, 2L**  
 This course explores some contemporary perspectives in the study of politics with particular emphasis on existentialism.  
*Pre-requisite:* POL 101/P.I.  
*Instructor:* A. Kontos
- POL 411S Canadian Federalism, 2L**  
*Pre-requisite:* POL 100/P.I.  
*Instructor:* D. Smiley
- POL 413F Provincial and Local Government, 2L**  
*Pre-requisite:* POL 100  
*Instructor:* TBA
- POL 414S Politics and Government of Communist East Europe, 2T**  
 An area study course with particular emphasis on problems of regional integration and the influence of ideology and the Soviet Union.  
*Pre-requisite:* POL 207F  
*Instructor:* B. Kovrig
- POL 415 Seminar in International Politics, 2L**  
 A seminar dealing with certain selected topics in International Relations largely based on the students' own presentation and work.  
*Pre-requisite:* POL 306/328  
*Instructor:* J. Barros
- POL 430E Workshop in Political Science, 2T**  
 A seminar for specialists in political science, with an orientation and structure dependent on the interests of available students and faculty.  
*Pre-requisite:* POL 100/101  
*Instructor:* TBA

## PSYCHOLOGY

Faculty Adviser: Professor I. M. Spigel

Psychology, the science of behaviour, deals with the manner in which organisms, including man, perceive and react to the world in which they live. Psychology addresses itself to the mechanisms and dynamics by which we acquire our responses and adapt to the environment—both the physical and the social. Since behaviour is complex and multi-determined, psychology must concern itself with physiological and genetic events as well as those which are entirely experimental. Psychology is thus a bio-social science, which—in a more or less evolutionary or adaptive framework—examines at many levels social interaction, developmental changes throughout the life of the organism, the structure and organization of the senses,

modes of perceiving and responding, the environmental events which shape our behaviour, the origins and implications of our drives and motivations, conflicts, emotions, and the wide variety of individual differences which are occasioned by differences in genetic endowment, physiological function and past experience. Because of the demands of science for rigor and objectivity, much emphasis is given to the techniques by which behaviour is studied; including the liberal use of animal investigation where it becomes virtually impossible to examine man himself directly to obtain answers. Extensive examination of a wide variety of experiments with humans and animals is paramount in all courses in psychology and forms the basis of theoretical discussion and generalization.

- PSY 100      Introductory Psychology, 2L**  
 Psychology is the science of behaviour; and this course seeks to acquaint the student with the scientific method as it is applied in attempting to understand both human and animal behaviour. This course is the strongly recommended pre-requisite for all other psychology courses.  
*Instructor:* Staff
- PSY 200F    Statistics and Research Design I, 3L**  
 Basic descriptive and inferential statistics.  
*Instructor:* TBA
- PSY 201S    Statistics and Research Design II, 3L**  
 Concerned with the design of experiments and the more advanced methods of statistical analysis, including complex analysis of variance.  
*Pre-requisite:* PSY 200F or equivalent  
*Instructor:* TBA
- PSY 203EF   Introduction to Social Psychology, 3L**  
 (1) A survey of contemporary areas of research in social psychology. Areas to be considered include social perception, attitudes, interpersonal relations, group processes, and ethnic attitudes.  
*Instructor:* TBA
- PSY 204ES   Personality, 3L**  
 (1) Emphasis on empirical research in such areas as authoritarianism, need for achievement, manifest anxiety, self-concept.  
*Instructor:* TBA
- PSY 208EF   Sensory and Perceptual Processes, 3L**  
 Examination of theoretical and experimental efforts aimed at understanding sensory and perceptual function. Emphasis will be placed on vision research at both the physiological and behavioural levels.  
*Instructor:* I. M. Spigel

- PSY 209ES Physiological Psychology, 3L**  
 An introduction to the study of the neural and endocrinological basis of behaviour.  
*Pre-requisite:* PSY 100 recommended  
*Instructor:* TBA
- PSY 213ES Comparative Psychology, 3L**  
 The innate and learned social responses of a variety of animals studies with emphasis on both the similarities and differences in the species specific modes of responding.  
*Pre-requisite:* PSY 100 recommended  
*Instructor:* L. Krames
- PSY 214S Human Learning and Memory, 3L**  
 Facts, theories, and methods in the study of human learning. Major emphasis will be on recent trends in the study of verbal learning, memory and verbal behaviour.  
*Instructor:* F. I. M. Craik
- PSY 216ES Experimental Design and Theory, 3L**  
 Problems involved in experimental design and the interpretation of experimental findings; the logical structure of psychological theories. Practice in the critical evaluation of experimental designs and the correction of experimental errors.  
*Pre-requisite:* PSY 100  
*Instructor:* T. M. Alloway
- PSY 218EF Classical and Instrumental Conditioning, 3L**  
 Phenomena of classical and instrumental conditioning in mammals will be discussed from both an empirical and a theoretical point of view. Seeks to acquaint the student with most of the basic findings in this area.  
*Pre-requisite:* PSY 100  
*Instructor:* T. M. Alloway
- PSY 300EF Population Regulation Mechanisms, 2L (Not offered in 1971-72)**  
 Seminars covering the behavioural and genetic aspects of population regulation. Students present papers and lead discussions on selected topics. Emphasis will be on mammals and insects. (May not be combined with JPZ 200E)  
*Pre-requisite:* P.I.  
*Instructor:* L. Krames
- PSY 310EF Individual Project**  
 Designed for students desiring to pursue independent research into a specific aspect of human or animal behaviour.

*Pre-requisite:* PSY 200F, 201s, a laboratory course and P.I.

*Instructor:* I. M. Spiegel

**PSY 311ES Individual Project**

Designed for students desiring to pursue independent research into a specific aspect of human or animal behaviour.

*Pre-requisite:* PSY 200F, 201s, a laboratory course and P.I.

*Instructor:* I. M. Spiegel

**PSY 326ES Abnormal Psychology, 3L**

A survey of theories and research on abnormal behaviour and psychological treatment with special emphasis on social learning theory and behaviour modification techniques.

*Pre-requisite:* PSY 204ES/PSY 218EF and P.I.

*Instructor:* K. R. Blankstein

**PSY 351ES Laboratory in Human Learning, 3P**

Experiments in human learning will be discussed and performed.

*Pre-requisite:* P.I.

*Instructor:* F. I. M. Craik

**PSY 352ES Laboratory in Animal Behaviour, 1L,3P**

Supervised demonstration experiments designed to familiarize students with methods of collecting, analysing, and reporting data in psychological experiments employing animal subjects. Students will also learn how to handle selected species of animal subjects.

*Pre-requisite:* PSY 200F and PSY 201s recommended and P.I.

*Instructor:* Staff

**PSY 353ES Laboratory in Sensory and Perceptual Processes, 1L,3P**

The fundamentals of sensory and perceptual processes, chiefly visual. Students conduct weekly laboratory experiments, using each other as subjects. (May not be combined with PSY 208s.) Fulfills laboratory requirements for specialists.

*Pre-requisite:* PSY 208EF

*Co-requisite:* PSY 200F and PSY 201s recommended and P.I.

*Instructor:* I. M. Spiegel

**PSY 354EF Laboratory in Physiological Psychology, 1L,2P (Not offered in 1971-72)**

A laboratory investigation of the physiological underpinnings of behaviour.

*Pre-requisite:* PSY 200F and PSY 201s (Recommended PSY 100 and 209ES) and P.I.

*Instructor:* TBA

- PSY 356ES Laboratory in Social Psychology, 1L,3P (Not offered in 1971-72)**  
 Independent research projects in the general area of social psychology. Each project will include the design of an experiment, data collection, and a written report. Subject matter for the projects can be anything within the general area of social psychology and is limited only by the facilities and equipment available or the students' ingenuity in constructing or arranging such facilities and equipment.  
*Pre-requisite:* PSY 203EF and P.I.  
*Instructor:* TBA
- PSY 362ES Animal Behaviour and Ethology, 3L**  
 A study of the social behaviour of organisms (human and non-human) as observed and measured in both laboratory and field settings.  
*Pre-requisite:* PSY 100, PSY 213ES and some statistics recommended.  
 Available to Second Year students on P.I.  
*Instructor:* TBA
- PSY 364ES Social Psychology: Attitudes, 3L**  
 Intensive study of social attitudes and opinions—their development, description and measurement, modification, and organization.  
*Pre-requisite:* PSY 203EF and P.I.  
*Instructor:* TBA
- PSY 365ES Social Psychology: Inter-personal Behaviour, 3L (Not offered in 1971-72)**  
 Detailed analysis of some of the determinants and consequences of various forms of social interaction; conformity and social influence, social comparison, affiliation.  
*Pre-requisite:* PSY 203EF and P.I.  
*Instructor:* TBA
- PSY 366ES Social Psychology: Social Perception, 3L (Not offered in 1971-72)**  
 Examination in depth of the ways in which people view others and of the psychological processes underlying these views: impression formation, ingratiation and the presentation of self, cognitive consistency.  
*Pre-requisite:* PSY 203EF and P.I.  
*Instructor:* TBA
- PSY 368EF Child Psychology, 3L**  
 A survey of contemporary research and theoretical controversies in the scientific study of child psychology.  
*Pre-requisite:* PSY 218EF is strongly recommended and P.I.  
*Instructor:* TBA

- PSY 369ES Adolescent Psychology, 3L**  
 Examination of theory and research in the field of adolescent psychology. Special emphasis on contemporary issues including student activism, drug abuse, school dropouts and gangs.  
*Pre-requisite:* PSY 368EF/P.I.  
*Instructor:* TBA
- PSY 370EF Motivation, 3L**  
 A view of the crucial variables which serve as an impetus to behaviour in both human and non-human species.  
*Pre-requisite:* Recommended PSY 100 and PSY 209ES. Available to second year students on P.I.  
*Instructor:* TBA
- PSY 371ES Advanced Physiological Psychology, 3L (Not offered in 1971-72)**  
 Advanced physiological psychology.  
*Pre-requisite:* PSY 209ES and P.I.  
*Instructor:* TBA
- PSY 372EF Psychophysiology, 3L**  
 Examines the interrelationships between physiological and psychological aspects of behaviour. The emphasis is on studies employing human subjects whose physiological responses are recorded on a polygraph while stimuli are presented which are designed to influence mental, emotional or motor behaviour.  
*Pre-requisite:* P.I.  
*Instructor:* K. R. Blankstein
- PSY 373ES Comparative Psychology of Learning, 3L (Not offered in 1971-72)**  
 The learning capacities of a number of different kinds of animals will be discussed and compared. Consideration will be given to theoretical and practical problems encountered in attempting to understand the evolution of learning capacities.  
*Pre-requisite:* PSY 100 and P.I.  
*Instructor:* T. M. Alloway
- PSY 400E Thesis Research, 1T**  
 In addition to periodic seminars, students will conduct independent, though supervised, research and write a thesis based upon the work.  
*Pre-requisite:* PSY 200F, 201S, one year of Psychology laboratory courses and a good background in psychological course work. For fourth year students only, and with permission of a supervisory staff member.
- PSY 410ES Topics in Developmental Psychology, 3T**  
*Pre-requisite:* PSY 200F, 201S, one year of Psychology laboratory and P.I. For fourth year students.

- PSY 415ES **Theories of Psychotherapy, 3T** (Not offered in 1971-72)  
*Pre-requisite:* PSY 200F, 201s, and P.I. For fourth year students.
- PSY 420EF **Topics in Social Psychology, 3T** (Not offered in 1971-72)  
*Pre-requisite:* PSY 200F, 201s, and P.I. For fourth year students.
- PSY 425EF **Topics in Abnormal Psychology, 3T** (Not offered in 1971-72)  
*Pre-requisite:* PSY 200F, 201s, and P.I. For fourth year students.
- PSY 430EF **Topics in Comparative Psychology, 3T**  
*Pre-requisite:* PSY 200F, 201s, 373ES, and P.I. For fourth year students.
- PSY 435ES **Topics in Learning, 3T**  
*Pre-requisite:* PSY 200F, 201s, and P.I. For fourth year students.
- PSY 440ES **Computer Applications, 3T** (Not offered in 1971-72)  
*Pre-requisite:* PSY 200F, 201s, and P.I. For fourth year students.
- PSY 445ES **Topics in Motivation and Arousal, 3T** (Not offered in 1971-72)  
*Pre-requisite:* PSY 200F, 201s, 370EF and one year laboratory course work in Psychology, and P.I. For fourth year students.
- PSY 450EF **Topics in Personality, 3T** (Not offered in 1971-72)  
*Pre-requisite:* PSY 200F, 201s, 204ES, and P.I. For fourth year students.

## RELIGIOUS STUDIES

Faculty Adviser: Professor L. J. Elmer

Religious Studies, as an academic discipline, is based upon a recognition of the fundamental significance of religion for man and society. Its intent is to provide students with an opportunity to deepen their understanding of man and his institutions and to explore in various ways the ultimate questions and convictions which have affected the foundations of his life throughout history. Among the perspectives and methods involved in the courses are those of History, Philosophy, Psychology, Anthropology, and Sociology.

Historically, man has expressed his profoundest convictions, questions, aspirations, and fears in many ways. His art, philosophy, conduct, social institutions, even his theories about the physical universe, have conveyed and illuminated his measure of himself and of the world in which he lives. From time to time these forms of expression coalesce within a particular pattern and tradition which we may identify as a "great" or a "world" religion, but along with such religions—both within them as well as outside them—are the individuals, each with his own personal convictions, values and interpretations of experience and of the symbols by which he represents to himself the ultimate concerns of life. The examination of all this constitutes the academic enterprise which we title Religious Studies.

- REL 211 **Communications Media and Religious Consciousness, 2L,1T**  
 The media as (1) extensions of man (McLuhan: *Understanding*

*Media*); (2) determinants of the thought forms of every theology; (3) creative myths of personal identity (Erikson: *Identity: Youth and Crisis*). The importance of mythic acts, clothes, cosmetics, dance, music, academic structures, rhetorical styles, novels, movies, poetry, the press, confrontation, for the creation of different forms of religious identity.

*Instructor:* L. E. Schmidt

**REL 230E    The Roles of Religion in Human Development, 2L,1T**

- (I) The positive and negative roles which religion has played and continues to play in human development and in cultural progress. A general analysis of personhood and the need in authentic human living for self transcendence. The phenomenon of faith; religion as wonder, religion as meaning; and religion as health.

*Instructor:* L. J. Elmer

**REL 302    Architects of Modern Religious Thought, 2L,1T**

Recent and contemporary thinkers, schools and trends in religious thought and their relevance to human problems. Today's radical ("God is dead") theologians and secularizers. Among those studied are: Buber, Marcel, Jung, Tillich, Bonhoeffer, Dewart, Cox, Hamilton.

*Instructor:* M. Lavelle

## **SLAVIC LANGUAGES AND LITERATURES**

Faculty Adviser: Mr. N. Shneidman

The Slavic literary and cultural tradition represents one of the great achievements of mankind. The Department offers a range of courses in Russian language and literature to provide access to that tradition. These courses are suitable for inclusion in a wide variety of programmes of study irrespective of whether the student has studied Russian in Grade XIII or not. Some students may specialize intensively in Russian language and literature. Others may simply wish to gain a working knowledge of Russian to aid their reading of important material in another field, as for example, science or social science. Language study in the Department emphasizes skills in using literary materials, and it also employs oral methods, combining small instructional groups with laboratory and conversational practice.

Russian literature has always been concerned with meaningful and universal human problems and has looked at them from a fresh and unique point of view. Giants of world literature such as Pushkin, Turgenev, Tolstoy and Dostoevsky, explore these problems in their nineteenth century novels, plays and poetry. The continuation and development of this same tradition under new Soviet conditions in the twentieth century by writers such as the Nobel Prize Winners, Sholokhov, Pasternak and Solzhenitsyn, makes another fascinating area of study.

- SLA 100     **Introductory Russian Language, 4T,1P**  
 Fundamentals of Russian Grammar. Practice in aural comprehension, speaking, reading, and writing. Language laboratory practice.  
*Instructors:* N. Shneidman and K. Lantz
- SLA 110E     **Introduction to Slavic Culture and Literature, 1T,1L (In English)**  
 The historical development of Slavic culture, languages, and literatures from the beginning to the present. Readings (in translation) selected from all periods of Russian, Ukrainian, Polish, and other Slavic literatures.  
*Instructor:* TBA
- SLA 210     **Nineteenth Century Russian Literature, 1T,2L (In English)**  
 Major literary currents in nineteenth century Russia; extensive readings (in translation) of the works of Pushkin, Gogol, Turgenev, Dosotevsky, Tolstoy, and others. Students specializing in Russian will be required to do a certain amount of reading in the original.  
*Co-requisite:* For specialists SLA 220  
*Instructor:* K. Lantz
- SLA 220     **Intermediate Russian Language, 3T,1P**  
 Continued study of Russian with language laboratory practice, oral practice, composition and conversation based on reading of literary texts and topics of current interest.  
*Pre-requisite:* Slavic 100 or equivalent  
*Instructor:* K. Lantz
- SLA 310     **Twentieth Century Russian Literature, 2T,1L**  
 Major trends in pre- and post-revolutionary Russian literature. Modernism, symbolism, and socialist realism. Exploring problems of creative process and artistic freedom. Reading (in translation) of the works of Gorky, Bunin, Sholokhov, Solzhenitsyn, and others. Specialists will be required to do a certain amount of reading in the original.  
*Co-requisite:* For specialists SLA 320  
*Instructor:* N. Shneidman
- SLA 312     **Tolstoy and Dostoevsky, 2T,1L**  
 A comparative study of the writings and ideas of the two novelists. Readings will include, in addition to other works, *War and Peace*, *Anna Karenina*, *Resurrection* by L. Tolstoy and *Crime and Punishment*, *The Idiot*, and *The Brothers Karamazov* by F. Dostoevsky. Prospective students are advised to read at least two of these works in the summer preceding the course.

*Pre-requisites:* One literature course  
*Instructor:* TBA

SLA 320     **Advanced Russian, 3T,1P**  
 Study of morphology and syntax, oral practice, composition, translation and stylistic analysis of selected texts. Extensive reading programme.  
*Pre-requisite:* SLA 220 or equivalent  
*Instructor:* N. Shneidman

**SOCIOLOGY**

Faculty Adviser: Professor W. E. Kalbach

One of the essential questions sociologists have had to confront concerns the extent to which the individual is determined by society and to what extent he is a determinant of society. In examining such questions, sociologists use the methods of science as well as those of the humanistic disciplines. The answers are not self-evident and traditional explanations often prove unreliable, both as a source of understanding and as a guide to action. In these circumstances, sociology provides another approach for assessing existing knowledge and developing more valid theories of social behaviour and the nature of society.

Students who wish to pursue careers in other fields, may gain from the study of sociology a clearer understanding of the human and social condition as it relates to their chosen profession and to contemporary institutions in general. In Canada and abroad, the demand for professional sociologists is very great for teaching, research, administrative and consulting positions. A professional career in sociology, however, usually requires advanced training beyond the undergraduate level.

Instructors in all 200-series courses will assume that the student has the background knowledge provided by Sociology 101.

- soc 101     **Introduction to Sociology, 2L,1T**  
 An introduction to the basic concepts, principles, and methods of sociology as a discipline for the study of society.  
*Instructor:* M. Cooper (and others TBA)
  
- soc 201     **Methods of Social Research, 2L,1P (Not offered in 1971-72)**  
 An introduction to sociological research procedures and elementary statistics.  
*Instructor:* TBA
  
- soc 202     **Structure of Interpersonal Relations, 3L**  
 Patterned relationships, social roles and social expectations which arise out of interaction among individuals.  
*Instructor:* A. Bennett

- soc 205      **Urban Sociology, 2L, 1P**  
Examines the city both as a significant development in world civilization and a working mechanism guided by contemporary policies and studies human behaviour in its multifaceted relations with the urban environment.  
*Instructor:* H. Breslauer and A .T. R. Powell
- soc 206E      **Social Stratification, 3L**  
Examines the various systems by which, in all human societies, rewards (such as prestige, power, wealth, and others) are differentially distributed, and the principal theories which have attempted to account for these phenomena.  
*Instructor:* TBA
- soc 208E      **Sociology of Deviance, 3L**  
A sociological analysis of deviant behaviour which examines theories of its genesis, social definition, maintenance, control, and social consequences.  
*Instructor:* H. Breslauer and P. Lorion
- soc 212      **Sociology of the Family, 2L, 1T**  
Development of the contemporary Western family with special emphasis on the changing relations among its members.  
*Instructor:* TBA
- Second-year students may be admitted to not more than one of Sociology 303-326Es if space is available, provided they have already had Sociology 101 and are concurrently taking two 200-series Sociology courses.
- soc 303      **Canadian Society, 3L**  
An analysis of the changing structure of Canadian society.  
*Instructor:* M. Cooper
- soc 304s      **Industrial Society, 3L**  
An examination of the impact of industrialization on social roles and institutions with special emphasis on problems arising from increasing automation and affluence.  
*Instructor:* M. Cooper
- soc 310F      **Race and Ethnic Relations, 3L**  
Social processes involved in minority relations in terms of race and ethnicity and their social, economic, and political consequences.  
*Instructor:* TBA
- soc 311      **Sociology of Education, 3L**  
An analysis of the relationship between education and society in comparative perspective; the consequences of the internal structure

of educational systems; and current controversies surrounding the function and structure of educational institutions.

*Instructor:* TBA

SOC 312F **Population and Society, 3L**

An analysis of mortality, fertility, migration, and their relation to population, social structure, mobility, and social change.

*Instructor:* W. E. Kalbach

SOC 313 **Sociological Theory, 3L**

The development of sociology and contributions of particular sociologists whose concepts not only have historical interest but also illumine the subject matter and method of contemporary society.

*Instructor:* A. Bennett

SOC 322E **Social Change, 3L**

An examination of technical, social, and ideological changes accompanying industrialization in both developed and underdeveloped countries.

*Instructor:* P. Lorion

SOC 326ES **Sociology As Strategy for Social Change, 2L,1P**

The utilization of the sociological imagination in achieving desired social change by active participation in groups committed to social change.

*Instructor:* A. T. R. Powell

SOC 390EY **Individual Studies I (3 hours per week)**

Intensive research of a problem of special interest under the supervision of a member of staff.

*Pre-requisites:* At least two Sociology courses at the 200-level and P.I.

SOC 392EY **Individual Studies II (3 hours per week)**

Intensive research of a problem of special interest under the supervision of a member of staff.

*Pre-requisite:* At least two Sociology courses at the 200-level and P.I.

## SPANISH

Faculty Adviser: Professor M. Scarth

The student who elects Spanish will be offered a twofold goal: the first, to learn to speak, understand, read and write with ease a language shared by over two hundred million people; the second, to become familiar with the civilization and intellectual life of the Hispanic world through study of the artistic and literary phenomena of that world.

The varied programme of Spanish Studies is designed to allow the student who is interested in specialization to become qualified to enter Graduate Studies in Spanish or to enter Type A courses at the College of Education under a dual-specialization arrangement. At the present time, Type A certificates are available in English and Spanish, and French and Spanish. The student may, of course, choose a combined specialization programme of Spanish and any other discipline.

The study of Spanish can also be a preparation for such careers as those in the foreign service, journalism, publishing and commercial and cultural relations between Canada and Spanish-speaking countries.

Latin America, with millions of Spanish speakers, should be of vital interest and concern to North Americans. It is inevitable that Canada's ties and contacts with this area will increase as the 20th century draws to a close. Thus opportunities for persons well versed in the Hispanic field should likewise multiply.

The language laboratory is used to promote fluency and after the first year, all courses, both literary and linguistic, are conducted in Spanish as much as possible in order to give the student maximum exposure to the language.

**SPA 100E    Beginning Spanish, 3L,2P**

For those who have had no previous background in Spanish. By the end of the year, students should have acquired sufficient skill in the written and spoken language to be able to specialize in Spanish if they wish. Emphasis will be placed on oral practice both in class and in the language laboratory.

*Instructor:* Staff

**SPA 191    Spanish Civilization and Culture, (in English), 2L**

Presents an overall view of the activities of the Spanish people from the early settlers of the peninsula to the current scene. Using the history of the country as a basic frame, the course will deal with the main currents of thought and the major accomplishments in literature, art, architecture and music. Slides, music and other illustrative material will be used.

*Instructor:* M. Scarth

**SPA 192    Latin American Civilization and Culture, (in English), 2L**

From the pre-Columbian civilization (Aztec, Maya and Tupa) to the present; significant manifestations in literature, art, music, architecture. Discussion of social, economic and political problems of Latin America. Illustrative material.

*Instructor:* E. Neglia

**SPA 220E    Intermediate Grammar and Composition, 2T**

(I) Conducted mainly in Spanish and designed for those who have completed a basic course in the language. Reinforces and refines

students' knowledge of Spanish to allow a greater range of expression and a broader understanding of the language.

*Pre-requisite:* SPA 100 or equivalent/Gr. XIII and P.I.

*Instructor:* TBA

- SPA 222Y **Conversational Spanish, 1T**  
 (I) Stresses idiomatic speech. Classes will include general conversation, short talks, reports on subjects of topical interest, discussion of three plays.  
*Pre-requisite:* SPA 100/Gr. XIII SPA or equivalent and P.I.  
*Instructor:* E. Neglia
- SPA 246EF **Introduction to Modern Spanish Drama, 2T**  
 (I) An introduction to the modern Spanish stage as portrayed by several leading playwrights in a variety of dramatic productions. In Spanish as much as possible.  
*Pre-requisite:* SPA 100/Gr. XIII SPA or equivalent  
*Instructor:* M. Scarth
- SPA 257S **Readings from Modern Spanish Prose, 2T**  
 (I) Several modern short stories and essays will be studied not only for their literary value but for the insight they provide into social and intellectual problems. In Spanish as much as possible.  
*Pre-requisite:* SPA 100/Gr. XIII SPA or equivalent  
*Instructor:* M. Scarth
- SPA 258 **Panorama of Spanish Literature, 2T** (Not offered in 1971-72)  
 (I) From works of several periods and in a variety of styles, students will discover the mastery with which representative Spanish writers have used the language to describe Spanish life and values. In the second term conducted almost entirely in Spanish.  
*Pre-requisite:* SPA 100/Gr. XIII SPA or equivalent  
*Instructor:* M. Scarth
- SPA 320EY **Creative Spanish, 1T**  
 Conducted mainly in Spanish and designed to meet the needs of those who already have a good basic knowledge of the language. Emphasis on improvement of style, translation, essay writing and oral practice.  
*Pre-requisite:* SPA 220E or equivalent and P.I.  
*Instructor:* J. Webster
- SPA 322Y **Advanced Conversation, 1T**  
 The aim of this course is to enable students to increase their fluency. Topics will include material on a variety of aspects of Hispanic life. Some short stories will be used as a base for discussion.  
*Pre-requisite:* One or more SPA 200-series courses or equivalent  
*Instructor:* E. Neglia

- SPA 325EY    Phonetics and History of the Spanish Language, 1T**  
 The course will begin with an introduction to phonetics, phonology and basic concepts of linguistics. It will then proceed to the study of the evolution of Spanish from its vulgar Latin origins up to the present day, in its phonetic, morphologic, syntactic and lexical aspects. An attempt will be made to relate linguistic development to historical and cultural aspects. Some general knowledge of Latin is desirable. Interest in theoretical linguistics and a working knowledge of Spanish will be assumed. Course is given in Spanish.  
*Pre-requisite:* SPA 220E or equivalent  
*Instructor:* O. Hegyi
- SPA 333EY    Golden Age Poetry, 1T** (Not offered in 1971-72)  
 Apart from individual poets, the course will study the gradual modification of Italian Renaissance influences through the undercurrent of persisting national traditions. Questions of literary theory will be touched upon as well. The course will be given in Spanish.  
*Pre-requisite:* SPA 220E or equivalent and P.I.  
*Instructor:* TBA
- SPA 346Y    Modern Spanish Drama, 1T** (Not offered in 1971-72)  
 The course will cover the period from the Romantic Drama of the eighteen-thirties up to the present day. The course will be given in Spanish.  
*Pre-requisite:* SPA 220E or equivalent  
*Instructor:* TBA
- SPA 356EY    Modern Spanish Novel, 1T**  
 The course will cover the period from the beginnings of the realistic novel in the nineteenth century up to the present day. Students will be expected to do a certain amount of reading of original texts as a preparation for their classes and a good working knowledge of Spanish is assumed as the course will be given in Spanish.  
*Pre-requisite:* SPA 220E or equivalent and P.I.  
*Instructor:* O. Hegyi
- SPA 366ES    Spanish American Poetry, 2L** (Not offered in 1971-72)  
 A study of some major poets and the different currents in Spanish American poetry.  
*Pre-requisite:* One or more SPA 200-series courses or equivalent  
*Instructor:* E. Neglia
- SPA 376F    Modern Spanish American Drama, 2L**  
 The development of realism in Spanish American drama; the rural theatre; the themes of justice and freedom in the modern plays.

*Pre-requisite:* One or more SPA 200-series courses or equivalent

*Instructor:* E. Neglia

**SPA 382ES Spanish American Novel, 2L**

A study of the representative novels of Spanish America, including the regional and the Indianist novel as well as that of the Mexican revolution.

*Pre-requisite:* One or more SPA 200-series courses or equivalent

*Instructor:* E. Neglia

**SPA 385F Spanish American Story and Essay, 2L (Not offered in 1971-72)**

Representative works of outstanding Spanish American essayists and short story writers including Sarmiento, Rodö, Quiroga, Borges, etc. will be studied.

*Pre-requisite:* One or more SPA 200-series courses or equivalent

*Instructor:* E. Neglia

**SPA 393 Twentieth Century Spanish History, (in English), 2L**  
(Same as HIS 393)

- (1) Conducted in English, this course is designed for students interested in History and Spain. An investigation of the causes and events leading up to the Civil War (1936-1939) and an attempt at evaluation of the consequences of that war for present-day Spain.

*Instructor:* J. Webster

**SPA 394 Survey of Spanish History, (in English), 2L, (Not offered in 1971-72)**  
(Same as HIS 294)

- (1) Conducted in English, for History and Spanish students. A general survey of the history of Spain: political, social, economic and cultural, from the time of the Romans to the present day.

*Instructor:* J. Webster

**SPA 420EY Advanced Composition and Stylistics, 1T**

Designed for those who already have a good knowledge of the language. Emphasis on ability to write good Spanish style and on the improvement of the facility through translation, essays, letters, etc.

*Pre-requisite:* SPA 320EY or equivalent and P.I.

*Instructor:* J. Webster

**SPA 436EY Modern Spanish Poetry, 1T**

Twentieth century Spanish poetry represents one of the most original achievements of the Spanish spirit and even from a universal point of view it is ranked among the most accomplished by critics familiar with

Spanish literature. Pre-requisite is genuine interest in poetry and a good knowledge of Spanish, as the course will be given in Spanish.

*Pre-requisite:* SPA 220E or equivalent and one other course of the 200 or 300-series, and P.I.

*Instructor:* O. Hegyi

SPA 443Y **Golden Age Drama, 1T** (Not offered in 1971-72)

The evolution of drama through the study of individual dramatists will be pursued from Lope de Vega to Calderón. The course will be given in Spanish.

*Pre-requisite:* SPA 220E or equivalent and one other course of the 200 or 300-series, and P.I.

*Instructor:* TBA

SPA 453Y **Golden Age Prose, 1T**

In the first term special consideration will be given to the picaresque novel, while the second term will be mainly dedicated to Cervantes. The course will involve extensive readings of original texts and it will be given in Spanish. A good working knowledge of Spanish is assumed.

*Pre-requisite:* SPA 220E or equivalent and one other course of the 200 or 300-series

*Instructor:* O. Hegyi

SPA 458Y **Introduction to Mediaeval Literature, 1T** (Not offered in 1971-72)

The aim of this course is to introduce students to mediaeval Castilian literature, from the Cantar de Mio Cid to La Celestina. The emphasis will be on general comprehension of the texts chosen and their place in the development of Spanish literature as a whole.

*Pre-requisite:* SPA 220E and one or more of the 300 or 400-series courses, and P.I.

*Instructor:* J. Webster

PRT 200EY **Beginning Portuguese, 1T**

A basic course in written and spoken Portuguese for those who have no background in the language.

*Instructor:* J. Webster

*Pre-requisite:* P.I.

## UNIVERSITY 100

Faculty Adviser: Professor G. F. McGuigan

University 100 is a pilot project in educating first-year students at Erindale College. This new programme is the equivalent of *three* regular first year subjects. The enrollment will be limited to 100 students, with five instructors. The purpose of the programme, in the course of providing a general education, is to give the student

time to pursue his own interests and discover his talents. More specifically the students and staff will inquire into the common principles of thought and reasoning that underlie the traditional academic subjects. Emphasis will be placed on such skills as perceptive reading, the organizing and relating of data, and the drawing of correct inferences.

Under the general theme of *Myths and Models*, students and instructors will examine key works related to man's idea of himself and his civilization. The staff and students will examine such questions as, what are the personal and historical biases that control our conception of reality? How have changing interpretations of the nature of man and the world influenced actions and institutions? What views of human freedom are found in such authors as Plato, the Bible, Freud, and McLuhan? Within the general framework of the programme students will be expected to pursue independent work. The work will be conducted through small discussion groups and directed individual study. A wide variety of media will be employed, with a sparing use of formal lectures. Central to the concept underlying University 100 is the exercise of individual and group autonomy; many of the decisions about the conduct of the programme will be the responsibility of the students. Students and instructors will work together to develop a community of learning.

The programme will prepare the student to pursue specialized studies in most courses during his upper years. For further information call 828-5286.

UNI 100      **Myths and Models**, 6T, 3 credits  
*Instructors:* Staff



